

# Juniper Point Specific Plan



## Juniper Point

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Flagstaff PBM, LLC  
PBM III, LLC  
5061 East Grant, Suite 121  
Tucson, AZ 85712

Master Plan  
Flagstaff, Arizona  
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Dover Kohl & Partners  
Town Planning  
1571 Sunset Drive  
Coral Gables, FL 33143  
(305) 565-0445

City of Flagstaff, Arizona  
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Second Draft Juniper Point Specific Plan November 1, 2006

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## I. INTRODUCTION

### Regional Plan Vision

The overall context for regional planning is adequately described by the 2002 Flagstaff Area Regional Land Use and Transportation Plan. To summarize, Regional Planning is an approach that tackles the issues of sprawl, traffic congestion, and loss of open space, as parts of a cohesive whole and not as separate problems. It recognizes both the region and the neighborhood as integral to building successful environments in which to work and live.<sup>1</sup> The vision is that Greater Flagstaff will have a compact land use pattern that shapes growth in a manner that preserves our region's natural environment, livability, and sense of community. By directing growth to well-defined contiguous areas, growth can be better accommodated without encouraging inefficient land use patterns; open lands and natural resources can be better protected; and public facilities and services can be delivered more efficiently.<sup>2</sup>

Planning Reserve Areas (PRA's) are comprised within the Stage 1 Urban Growth Boundary and are considered suitable for future urban development, are not currently serviced with infrastructure, and come with the understanding that some of the areas are to be preserved for urban open space. PRA's are recognized as having the potential to develop at urban densities, and those PRA's mapped at a density of seven the required average is a minimum density, with no maximum density. The required minimum density of seven is intended to couple with the tenets of Traditional Neighborhood Design to produce walkable communities, and help maintain an affordable housing stock

through attached housing units and smaller lots for construction.<sup>3</sup> To advance and promote Traditional Neighborhood Design in the PRA's a system of regulatory and procedural incentives will be provided.<sup>4</sup> The list of attributes of Traditional Neighborhood Design are listed in the Regional Plan's glossary of terms.<sup>5</sup> Emphasis upon design is recognized as making higher densities an attractive alternative. The physical design of the built environment is an underpinning to end sprawl and bring shape, form, livability and functionality to the region.<sup>6</sup>

### Juniper Point Site Characteristics

In terms of site context, Juniper Point is a 318.65-acre master planned community in south-central Flagstaff. It is the first true *new urban* community in Flagstaff adopting as its guidelines the concept of traditional neighborhood design specified in the 2002 Flagstaff Area Regional Land Use and Transportation Plan. The TND principles are implemented through three governing documents: a form based code, a regulating plan, and this Specific Plan.

The single-most important design feature present at Juniper Point is its rather vigorous topography and the resulting natural beauty. The Juniper Point land base is predominantly characterized by a large canyon known as Bow and Arrow Wash. Bow and Arrow Wash drains a basin to the west of Juniper Point including the areas within the Bow and Arrow Neighborhood and those further south towards Ponderosa Trails. The Bow and Arrow Wash joins the Rio de Flag just east of the property near the Rio de Flag

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<sup>1</sup>Regional Plan, at p.1-9.

<sup>2</sup>Regional Plan, at p.1-12.

<sup>3</sup>Regional Plan, at p.1-19 thru 1-20.

<sup>4</sup>Regional Plan, at p.1-21.

<sup>5</sup>Regional Plan, at p.1-46.

<sup>6</sup>Regional Plan, at p.1-21.

wastewater treatment plant. The direction of all flow is west to east then north, where the Rio de Flag will eventually meet the Little Colorado River. As a result of these natural flows and other geological events, the property is divided almost evenly by the canyon into a north half and south half. Each resulting half is further encumbered by hilly conditions interspersed with drainages, which together create significant natural beauty as well as slope and topographic challenges addressed by the site development plan.

The second predominant characteristic of the site in its natural state is the vegetation including ponderosa. Tree surveys indicate the property is overgrown with thickets of small diameter ponderosa, and nicely appointed with occasional large yellow pine. The view shed to the north is impressive, and includes unobstructed and commanding views of the San Francisco Peaks from many locations. The opportunity to create a very satisfying public experience of these natural features appears in the master design and is a key consideration in planning the public realm.

#### **Surrounding Neighborhood Development.**

- North: Interstate 40. Lands beyond Interstate 40 are zoned Rural Residential. Little America owns adjacent lands that form a triangular piece along the north east parcel boundary.
- South: Pine Canyon Club, including 27 acres of undeveloped land assigned MR zoning for multi-family and deed restricted affordable housing up to 120 units. The balance of Pine Canyon Club is zoned R1 and is master planned for private golf and estate sized lots.
- East: Section 26 of Arizona State Lands, zoned RR.
- West: Lands under control of Arizona Board of Regents, currently either undeveloped or

devoted to the Coconino County Community College and zoned PLO-E.

#### **HISTORY AND PROCESS**

In 2005 PBH III, LLC., acquired Assessor's Parcel Number 104-14-001B, a 93.9-acre parcel with frontage on JW Powell Boulevard along its southern boundary. In 2006 Flagstaff PBH, LLC., acquired Assessor's Parcel Number 104-14-003C, a 224.75-acre parcel directly to the north of the PBH III property, with east-bound Interstate 40 along its northern boundary. Both parcels share a western boundary with lands presently controlled by the Arizona Board of Regents and an eastern boundary with lands presently controlled by the Arizona State Land Department. A 27-acre parcel presently belonging to Lone Tree Investments occupies a rectangular cut-out within the PBH III parcel. Together, the two properties referred herein as Juniper Point comprise 318.65 acres.

When acquired, Juniper Point's zoning consisted of undeveloped land zoned Rural Residential, one unit per five (5) acres. Juniper Point also fell within a "Planning Reserve Area" designated with a minimum average density of seven (7) units to the acre. Juniper Point also lay within Urban Growth Boundary Stage 1, reserved for development occurring in the near term.

Before PRA's are developed master planning is required to address compatibility with surrounding development, sensitivity to natural landscapes and open space, consideration for affordable housing, and conformance with the policies and provisions of the Regional Plan.

To guide the formulation of planning concepts and approaches, the private owners formed a development team lead by Dover Kohl & Partners, of Coral Gables, Florida, the local land



use law firm of William P. Ring, P.C., Shephard Wesnitzer Engineering, Civtech Engineering, HPE-Engineering Inc., and others. The team was formed to discuss objectives with the City of Flagstaff, listen to community views and perspectives, to collaborate on potential approaches, review planning concepts, and provide direction on the drafting of a Plan Amendment to the Flagstaff-Coconino County Regional Land Use and Transportation Plan. The proposed Amendment would accomplish two purposes: (1) create text amendments that allow for a Traditional Neighborhood District (TND); and (2) change the land use designation of Juniper Point from PRA to TND. These amendments were accomplished in December, 2006.

Concurrent with amendments to the Regional Plan this Specific Plan was developed in cooperation with the private owner and development team and the City of Flagstaff, and with the collaborative input and assistance of the citizens of Flagstaff and other important interest groups including: Flagstaff Metropolitan Planning Organization; Arizona Department of Transportation; United States Forest Service; Arizona Game & Fish; Northern Arizona University; Arizona Public Service; Qwest; Northern Arizona Intergovernmental Public Transit Authority; The Flagstaff Chamber of Commerce; The Northern Arizona Home Builders; Friends of Flagstaff's Future; Friends of Walnut Canyon; Concerned Citizens of Flagstaff; individual members of the Housing Policy Task Force, and numerous private parties.

This input and response to the planning effort was facilitated by Dover Kohl & Partners through use of the "charrette" process. For nine days in May, 2006, Dover Kohl staff (DK) occupied a small conference room on the NAU Campus. Through numerous field trips through Flagstaff's built environment DK dissected Flagstaff's historic and traditional development

trends, forms and architectural features. DK spent considerable physical time on the Juniper Point site. DK publically led small groups through a drafting exercise which established the basic forms, functions and uses for Juniper Point. Open space, trails, parks, transportation, municipal infrastructure, storm water and bio retention, and related community systems were over-laid upon the community's consensus plan.

The development team refined the plan throughout June and July, 2006, and continued to meet with community interest groups. In August, 2006, the development team submitted a narrative analysis supporting the requested Regional Plan Amendments, along with a draft form based code and regulating plan. Numerous additional meetings were held between the development team and the City of Flagstaff, Flagstaff Metropolitan Planning Organization, NAU, and others. In October, 2006 the development team submitted a draft of this Specific Plan with supporting form based code and regulating plan for City Council consideration. The result of this collaborative effort is the contents of this Specific Plan for Juniper Point, and the accompanying form based code and regulating plan.

## **II. PLANNING CONCEPTS**

The Juniper Point Specific Plan envisions a whole community consisting of four distinct neighborhoods where residents can have access to housing that is located on interesting streets, that comes in a variety of forms and in a range of affordability that is generally accessible to working families. Families will live within walking distance of most necessities, have easy access to higher education, be capable of utilizing the home and other flexible commercial space for cottage industry and neighborhood work space, and be nearby to other workplaces such as Pulliam Airport. Particular attention is paid to creating a pleasing experience of urbanity by emphasizing the importance of space and place within the "public realm". This is accomplished by designing the urban form to the human scale.

The Plan supports a diversity of transportation opportunities. These alternatives are provided by a general pattern of walkability, easy access to public transit and trails, support for alternative modes such as bicycles, and limited speed thoroughfares that passively encourage co-existence - as opposed to dominance by - the automobile. The TND aspects of traffic design de-emphasize the reliance upon the automobile by subtly correcting for the need to speed the movement of cars. Instead, the transportation corridors serve multiple functions and evolve into general thoroughfares of activity characterized by wider sidewalks and parkways, narrower asphalt sections, with homes and businesses closer to the street edge, and within a bio-diverse landscaping palate that, altogether, provide streets of interest within the fabric of the community.

The Plan is an approach to addressing the issues of sprawl, traffic congestion, and loss of open space and "sense of place". The Plan creates a compact urban form, transportation

opportunities, and a generous set aside of open space. The Plan produces a greater yield per acre of residential and commercial uses with less consumption of the local land base, and utilizes public infrastructure in a more efficient and cost effective manner than traditional suburban development.

By virtue of this Specific Plan, Juniper Point will build out at the scale of the neighborhood, with a firm sense of place, within relatively easy reach of the necessities of daily living, and with vital neighborhoods and access to open spaces.

### **Traditional Neighborhood Design**

Traditional neighborhood design is an approach to planning and community design that is based upon traditional town patterns. It is characterized by mixed use development where residential, commercial, and civic buildings are within close proximity to each other. By design, a range of housing types and choices is provided. Neighborhoods, sized for easy walking distance, function as the basic building block of development. These developments preserve heritage and natural resources, and significant open spaces, and they simultaneously reduce the amount of land consumed by the built environment, thereby utilizing land and infrastructure efficiently.

The design may include collectors and arterials, but has a grid pattern of streets that provide a variety of routes for local traffic. In addition, it places an emphasis on transit, bicycle, wheelchair, and pedestrian transportation systems. Narrow street widths, on-street parking, street trees, and other features are intended to slow local traffic and create a safe, attractive environment for all transportation modes.

Emphasis is placed upon the design of the public realm; streets, neighborhoods and town centers, public spaces, community facilities, and other

features that foster a sense of community. The built environment focuses upon human scale, and indigenous, or regional design.

The heritage and environmental resources of an area influence the design of the development such that resources are preserved. Environmentally responsive stormwater systems, the use of indigenous vegetation, and energy conservation measures in the design and orientation of structures also helps create a sustainable development.

### **Form Based Coding**

A form based code is development regulations that go beyond conventional zoning controls of segregating and regulating land use types and defining building envelopes by setback requirements and height limits. The intent of a form-based code is to create a predictable public realm through the definition of urban form by addressing the details of relationships between buildings and the public realm of the street, the form and mass of buildings in relation to each other, and the scale and type of streets and blocks. Form based codes are based upon specific urban design outcomes desired by the community that may be identified through an inclusive, design-focused public participation process. The regulations in form-based codes are applied to property through Regulating Plans that map the community with geographic designations that are based upon the scale, character, intensity, and form of development rather than differences in land uses.

### **Regulating Plan**

A regulating plan is a map that accompanies a form-based code and specifies the intensity, form, and character of an area rather than just mapping land uses. It shows designs of the streets and public open spaces, and is based

upon the intensity of urbanism. It designates where standards for building placement, design and use will apply.

### **Specific Plan**

A specific plan serves as a concept plan for a designated area. It defines goals, objectives and policies of the Regional Plan as applied to a smaller geographical area. The purpose of the Specific Plan is to more effectively implement the Regional Plan. A Specific Plan provides the greatest level of detail regarding development within its area of jurisdiction. Upon adoption, all development within the area of the Specific Plan shall be in accordance to that plan, as amended from time to time.

### **Summary**

The Juniper Point Specific Plan relies upon the previous three planning concepts - traditional neighborhood design, form-based coding, and regulating plan - to carry forth a precise form of development for Juniper Point, as further described in the code and the plan. The goals, objectives and policies of the Regional Plan are fulfilled through this Specific Plan.

### III. SPECIFIC OBJECTIVES FOR THE "PLANNING RESERVE AREAS"

#### THE JUNIPER POINT CONTEXT

Generally speaking, the Planning Reserve Areas are intended to accommodate specific areas within the Urban Growth Boundary that are recognized as having the potential to develop at urban densities which, in turn, will require extension of urban infrastructure and municipal services. No specific land uses are designated for the PRA's. The uses proposed, however, will efficiently utilize land and infrastructure, and provide for open space. The Regional Plan establishes review criteria in circumstances where PRA's - such as Juniper Point - are being considered for re-designation to another land use category for development.<sup>7</sup>

1. Planned Land Uses - PRA's must be master planned. The master plan shall address:
  - compatibility with surrounding development
  - the presence of interstates.
  - provision of public facilities in some areas.
  - compact development.
  - protection of surrounding open spaces.
  - provision of transit services.
  - walkable neighborhoods.
  - affordable housing opportunities.
  - live/work environments.
  - more desirable marketable and higher value development.
  - sensitivity to natural landscapes.
  - parks and trails protection and needs.
  - conformance with appropriate Regional Plan policies.

Through the accompanying form-based code, regulating plan, and attached exhibits, Juniper Point satisfies these master planning considerations. Briefly, the Juniper Point master plan encompasses 320 acres and 1590 homes, in a blend of density 'transects' and a mix of flexible commercial and residential space. The form is both compact, achieving the minimum density of seven (7) units per acre, while at the same time protecting, preserving and dedicating approximately one-third of the project area to parks and open space. The foundation for the layout of four separate neighborhoods lies in the guiding principle that each neighborhood be "walkable"; that is, capable of being sufficiently compact so as to be traveled by residents in search of essential or typical needs but without resorting to the automobile. Natural landscapes are preserved, particularly along the south-side canyon rim leading into Bow and Arrow Wash. In addition, the view sheds are set out in such a way as to maximize public access to the view, both from parks and from streetscapes. The project area is serviced by a network of social trails serving both the greater FUTS Trail artery in the bottom of Bow & Arrow Wash, as well as providing connectivity to the north and south neighborhoods.

The project calls for thirteen (13) different housing types, from single-family detached to Main Street and Corner Store buildings with commercial and second floor residential apartments. The housing types - arranged across transects - provide diversity of size, scale and presence. The quantity, arrangement and distribution of each unit within each neighborhood and transect will be governed by the regulating plan and offer a range of affordability. The project incorporates "workforce housing" as a residential component. The precise method of providing workforce and the related "affordable" housing is a matter for rezoning stipulations and development agreements.

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<sup>7</sup>Regional Plan, at p. 1-37.

An internal transportation network of carefully tailored public and private streets capitalize upon pedestrian-friendly and bicycle-oriented design. As mentioned, trails of both a FUTS standard as well as social trails weave the transected neighborhoods together. In total there is a balance of transportation facilities and modalities that provide a diversity of choice and alternatives to auto-oriented dependence.

A regional transit station is located in the northwest quadrant neighborhood, making regional connections available to Northern Arizona University, the Airport, Downtown and to areas serviced by the Mountain Line transit system. The northwest quadrant neighborhood is also laid out in such a manner as to connect and plug into the Coconino County Community College campus immediately to the west, creating a seamless campus feature. The transit station can thereby service both facilities - college and neighborhood, and serve as a public gathering area and general service center.

The project is located in water Service Delivery Zone B and has adequate access to water and wastewater via the Bow and Arrow Wash.

The regulating plan sets aside areas for a fire station, if needed, to meet emergency response standards; a potential school site if desired by a public, private or charter provider; stormwater drainage facilities utilizing both a sub-regional approach as well as a more natural utilization of the topography to accomplish detention. And as mentioned, transportation facilities, water and wastewater, and recreational facilities are integrated into the overall master plan.

2. Zoning Requirements for Adequate Public Facilities - This particular review criteria has been superceded by City Resolution 2005-97, and will be addressed with the attending rezoning and development

agreements.

3. Proposed Type of Development; Proposed Text Amendment - Traditional Neighborhood Design (TND)<sup>8</sup> development is preferred for PRA's<sup>9</sup>. As explained in the expanded review of Policy Compatibility below, the project meets or exceeds standard TND criteria.

4. Required Average Density Calculation - As stated, Juniper Points falls within PRA-7, minimum density seven units per acre. The required average density is a gross density calculated on all land associated with residential development, including rights-of-way associated with residential area development, but excluding:
  - a. non-residential uses; and
  - b. "publically-owned public spaces" (such as parks and open space).

Multiple dwelling unit types may be utilized at various densities to achieve the required average density.<sup>10</sup>

The following calculation is an approximation of gross area minus non-residential area, minus dedicated public spaces:

318.65 total gross acres  
 - 17.95 acres non-residential(9.54 parks and  
 8.41 commercial)

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<sup>8</sup>Traditional Neighborhood Design is defined in the Regional Plan, Glossary of Terms, at p. 1-46.

<sup>9</sup>See, Regional Plan, Planning Reserve Area Review Criteria, Proposed Type of Development, at p. 1-37.

<sup>10</sup>The calculation for minimum density can be found at Regional Plan, Planning Reserve Area Review Criteria, Required Average Density Calculation, at p. 1-37.

- 7.10 acres bio-retention facilities
- 97.90 acres of dedicated public spaces, required dedications of floodplain and floodway, and "non-residential" spaces.<sup>11</sup>

**195.70 Net useable acres**

x 7 units per acre average

**1369.90 minimum residential units.**

As stated, the Specific Plan for Juniper Point proposes 1590 residential units, comprising a variety of single-family attached and detached houses, duplexes, rowhomes, condominiums, "mansion" and courtyard and traditional apartments, and mixed use residential units. An Appendix provides a matrix of housing unit types and quantities across four distinct sub-neighborhoods. The precise ratio of rental to ownership will be determined as individual site plan development occurs. For example, the "mansion" and "courtyard" building form could consist of ownership condominiums or rental apartments. Under form-based coding the outward streetscape of the structure need not indicate the internal dynamics of ownership vs. rental.

Market conditions may allow for enhanced density through a variation of product choices and distributions including "Accessory Dwelling Units" on single family attached and detached lots. An "ADU" is an apartment not greater than 700 square feet sharing ownership and utility connections with a Principal Building. An ADU may or may not be within an outbuilding. The

precise quantity of ADU's is subject to the primary purchaser's election to also include an ADU with the principal residence. It is anticipated that approximately 60% of purchasers who have a choice will elect to also incorporate an ADU. For purposes of this application the current proposal without ADU's achieves a minimum density of 7.88 units/acre, and satisfies the minimum density requirements specified in the Regional Plan for PRA's.

5. Policy Compatibility - The policy framework establishes the basic policy direction for the region based upon consideration of the following:

- Land Use and Growth Management, including housing and neighborhoods, commercial development, industry and employment, infill and redevelopment, and cost of development.
- Transportation.
- Open Space, Parks, Recreation and Trails.
- Community Character and Design.
- Natural and Cultural Resources and the Environment.
- Water Resources.
- Community Facilities and Services.
- Public Safety.

The framework defines the fundamental principles and basic policy choices necessary to guide growth and development of the region. For each element the policy framework sets goals, and each goal is supported by a set of policies and strategies for implementation.

In addition, Ariz.Rev.Stat. Sec. 9-461.05(D)(2) calls for mandatory municipal planning to include a growth element that identifies areas that are particularly suitable for planned multi-modal transportation and infrastructure expansion. The plan should consider improvements designed to support a planned concentration of a variety of

The precise acreage may vary slightly depending upon final zoning and development agreements, related adjustments to the regulating plan, and conditions of zoning approval.



uses that makes the automobile and other transportation alternatives more efficient and infrastructure expansion more economical.

The Regional Plan framework identifies Urban Growth Boundaries<sup>12</sup> and Planning Reserve Areas<sup>13</sup>. The Juniper Point Specific Plan meets or exceeds the criteria established by the Regional Plan. Each element is considered and discussed as follows and serves as a method for establishing principles that guide the orderly development of Juniper Point.

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<sup>12</sup>Policy LU1.2, Strategies LU 1.2(a-b).

<sup>13</sup>Policy LU1.3, Strategy 1.3(a-b).

#### **IV. LAND USE ELEMENT**

##### ***Land Use Goal LU1***

**Greater Flagstaff will have a compact land use pattern within a well-defined boundary that shapes growth in a manner that preserves the region's natural environment, livability, and sense of community. Flagstaff Will continue to offer the primary types of housing design developments that have its land use patterns: the conventional and traditional neighborhood scale which provide a choice of housing types and supporting non-residential uses within walking distance.**

The Plan area is within the UGB, Stage 1.<sup>14</sup> The Juniper Point Specific Plan represents a mix of mutually supportive uses, both residential and non-residential, that includes a network of interconnected streets and pedestrian and bicycle connections.<sup>15</sup> The Regulating Plan and Form Based Zoning Code provides a design character including attention to streetscape and unifying architecture, but also allows for diversity of design often lacking in standard-based zoning codes.<sup>16</sup> This Plan places emphasis upon all transportation modes, and specifically incorporates an inter-connectedness that de-emphasizes the automobile and promotes walking and biking, while providing meaningful access to other modes of transportation including public transit.<sup>17</sup> The project will require improvements to the street network and collectors beyond the planning area. This subject

will be discussed at length in the Transportation Element.

The Regional Plan places an emphasis upon, and encourages development of Traditional Neighborhood Design.<sup>18</sup> As stated in Policy LU1.11:

"The Regional Plan promotes the creation and establishment of neighborhood units with mixed land uses, a variety of dwelling types, activity centers that are walkable, alternate modes of transportation routes, and design that is sensitive to existing surrounding development".

The Specific Plan is conceived, designed and promotes what it strives to achieve: walkable neighborhoods planned around a human scale, where the people of Flagstaff can live and where some will work, in a variety of housing types with nearby activity centers, that make for a whole community; and one that is sensitive to the environment, its natural surroundings, and the preservation of open space.

##### ***Land Use Goal LU3***

**The Regional Land Use and Transportation Plan will be coordinated with state and federal land management policies.**

Adjacent to, and east of, the Planning area is Section 26 of State Lands. The Regional Plan encourages use of master development plans for Planning Reserve Areas in part as an effort to provide for the orderly growth of the City of

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<sup>14</sup>Regional Plan, Map 3.

<sup>15</sup>Policy LU1.5, Provide for New Mixed Use Neighborhoods.

<sup>16</sup>Policy LU 1.9 - Promote quality design.

<sup>17</sup>Policy LU1.10 - Place Emphasis on all Transportation Modes.

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<sup>18</sup>Policy LU1.11, and Strategy LU1.11(a): Use Traditional Neighborhood Design criteria, overlay districts, and incentives to develop Planning Reserve Areas.

Flagstaff.<sup>19</sup> The Specific Plan is designed to integrate with Section 26 when the Section develops, particularly with regard to transportation elements. Integration should make it more likely that Section 26 will develop in a similar TND fashion as Juniper Point and thus coordinate State Land development in a manner similar to Juniper Point.

### **Land Use Goal C1**

**Shopping and service areas will be convenient to residents as well as visitors to the region in a manner that meets their needs, while remaining compatible with surrounding land uses.**

The TND layout of the Juniper Point neighborhoods applies targeted commercial uses that rely upon locational considerations<sup>20</sup> such as walkability and convenience for transit-oriented users.<sup>21</sup> At appropriate activity centers, the Juniper Point design relies upon mixed use structures in multi-story buildings that provide convenience without altering the characteristics of the buildings or the neighborhood.<sup>22</sup> The Regulating Plan offers the following square footages of lot area devoted to "mixed uses":

|                       |                                |
|-----------------------|--------------------------------|
| Mixed Use Lots:       | 114,248 sq.ft.<br>(2.62 acres) |
| Corner Store Lots:    | 29,751 sq.ft.<br>(0.68 acres)  |
| Office Building Lots: | 54,707 sq.ft.<br>(1.26 acres)  |

<sup>19</sup>LU 3, Policy LU3.2, Strategy LU 3.2(A).

<sup>20</sup>LU C1, Strategy C1.1(a).

<sup>21</sup>LU C1, Policy C1.5.

<sup>22</sup>LU C1, Policy C1.3, Strategy C1.3(a); Strategy C1.5(a).

|                      |                               |
|----------------------|-------------------------------|
| Civic Building Lots: | 53,776 sq.ft.<br>(1.23 acres) |
|----------------------|-------------------------------|

|                             |                                |
|-----------------------------|--------------------------------|
| Total mixed use commercial: | 252,482 sq.ft.<br>(8.41 acres) |
|-----------------------------|--------------------------------|

These areas are not to be confused with square footages of floor plans. The square footage of individual floor plans will depend upon the performance standards within each Transect as further set out in the form-based code; the building layout (containing less potential sq.ft. than the total lot) and the presence of second or third floors (which could contain more potential sq.ft. than the lot). Use of the regulating plan for location of parking lots, buildings and architectural designs assures that the preference for mixed use in commercial nodes will be maintained. In accordance with Land Use Goal C1<sup>23</sup>, the regulating plan does not provide for drive-through commercial facilities. The availability of parking supply is limited, and strategically located so as to diminish the relevance of automobile trips to commercial uses and encourage other methods of short trip transportation.<sup>24</sup>

### **Land Use Goal C2**

**Downtown Flagstaff will continue to serve as the focal point of the community, as established by development intensity, land use, building height, and high quality urban design.**

For all its TND qualities, Juniper Point does not duplicate the level of services found in the historic Downtown area. Juniper Point is not a tourist destination and does not concentrate activity in one node. Rather, it disperses activity across four

<sup>23</sup>Goal LU C1, Policy C1.4, Strategy C1.4(b).

<sup>24</sup>Goal LU C1, Policy C1.3, Strategy C1.3(b).

walkability points. Furthermore, the architectural and historic heritage of the Downtown is unique. It is a destination for high quality professional services, government services, and tourism by day, and a community focal point for restaurants, bars and entertainment at night. The role the Specific Plan plays in reinforcing Downtown's focal qualities is by providing opportunities for transit and trail system access to the Downtown.

#### **Land Use Goal IE1**

**The community will enjoy a healthy, thriving economy with opportunities for quality and diversified employment of various economic levels for its residents with livable wages, and environmentally responsible industries that make a positive contribution to the community and the economy.**

While the Specific Plan does not propose large scale employment centers such as regional commercial retail or industry, the Plan recognizes a supporting role as a place for housing the employees that work in various service sectors. Plan area is strategically located so as to provide places of housing for the employment base at Coconino Community College or Northern Arizona University, for example. The Plan area is also proximate to an expanded Airpark at Pulliam Airport.<sup>25</sup> While not regional in scale, Juniper Point's master plan allows for neighborhood commercial and associated employment within its activity centers. Finally, one fundamental tenet of TND is the opportunity for individuals to tele-commute from home and thereby reduce the need to have employees congregate at off-site places of employment.<sup>26</sup>

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<sup>25</sup>For example, See: Goal IE1, Policy IE 1.1; Strategy IE1.1(b).

<sup>26</sup>Goal IE1, Policy IE1.6, Strategy IE1.6(a).

It is the daily, repeated demand to "congregate" employees at employment centers that drives - in large part - transportation planning and 'peak hour' requirements. One subtle achievement in the Specific Plan's TND design is that it alleviates traffic demands by providing assorted opportunities including the opportunity to maintain employment in the neighborhood or at home in cottage and home based occupations.

#### **Land Use Goal HN1**

**The supply of affordable home ownership, rental and special needs housing units affordable to low- and moderate-income household will be increased.**

As mentioned, at full build-out Juniper Point would provide 1590 residential units in a compact form spanning 13 alternative designs, at assorted locations, and offered at a variety of price points. An additional 51 accessory dwelling units may appear at the election of the site built developer. The combination of variety in design, location and price contributes not only to the overall stock of housing, but to the overall supply of housing in various sub-markets. The alternative of residential development at the current RR-5 zoning (64 potential estate size units) would not make a measurable impact to the overall housing stock, let alone a meaningful contribution at price points affordable to residents of Flagstaff. The change in land use patterns established by the Specific Plan contributes positively to substantially increasing housing supply and is an efficient use of the remaining private land base for that purpose.

In addition to adding to housing stock, it is important to add to the particular stock of workforce housing. The health of greater Flagstaff's economy is dependent upon the simple availability of a workforce. One major constraint on workforce supply is the availability of housing stock to working families earning 80% or more of

area median income.<sup>27</sup> So not only is it the supply of housing that matters, the housing has to be of the right form to support the economy of the community.

The 2005 Community Housing Policy Task Force recommendations define "workforce housing" as housing that is affordable to residents, or potential residents, who earn up to 150% of the Area Median Income for their family size, when they are spending no more than 35% of their gross income on housing.<sup>28</sup>

The Juniper Point Specific Plan makes a positive contribution toward meaningful workforce housing through Traditional Neighborhood Design:

- Traditional neighborhood design with compact form is intended to provide a broad band of housing choices across a range of prices.
- The Specific Plan anticipates approximately 51 additional accessory dwelling units ("granny flats") which purchasers may elect to also develop. These ADU's are intended to be used either as small apartments or workplaces at the owner's election.
- The Specific Plan includes rental apartments that will add to the gross number of apartments currently existing in the community.

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<sup>27</sup>The other major variable in workforce supply is the availability of an educated and trained workforce. Proximity to Coconino Community College and NAU allows Juniper Point's residential component to factor into workforce preparedness.

<sup>28</sup>Community Housing Policy Task Force Final Report, December 5, 2005, at page 3.

The Specific Plan adopts Form Based Coding. To explain, few - if any - meaningful developer incentive programs currently exist within the Land Development Code to produce Affordable Housing. The present bonuses available through the Land Development Code (such as minimal resource relief) are no incentive, and thus, of no consequence to the decision to build Affordable Housing. The Community Housing Policy Task Force found that other provisions of the LDC - such as generous setbacks, excessively constricted floor area ratios and lot coverages, prohibitive height restrictions, and "tripling-up" of slope, floodplain and tree resource requirements, together constrict the supply of land available for housing. Furthermore, current City of Flagstaff Engineering Standards that encourage unnecessary pavement widths for street sections increase the cost of development without adequate consideration for the impacts upon affordable housing. The very adoption of Form Based Coding and thoroughfare design will provide a modicum of relief from the regulatory conditions that restrict the supply of land for housing. Form Based Coding partially reverses the effect of excessive setbacks, FAR's and height restrictions. It minimizes pavement sections in thoroughfares, enhances access to other modes of transportation, and improves the housing yield and overall efficiency of public facilities. Form Based Coding itself contributes as such to the availability of affordable housing supply without having to amend the Land Development Code to accomplish the same objectives.

As the Plan area develops, TND neighborhoods may expand into adjacent PRA's, bringing the benefits of more affordable housing to the

growth corridor lying south of Interstate 40 between Continental and Pulliam Airport.

All these items, alone or in combination, contribute both to the availability of affordable housing for the workforce.

### **Land Use Goal HN2**

**New neighborhoods will be built and support will be given to existing neighborhoods that integrate a variety of housing types and densities and amenities, services, and retail that ensure opportunities for a variety of household income levels.**

The Regional Plan specifies policies and strategies to increase the supply of affordable housing. They include:

- Promote development of mixed use neighborhoods.<sup>29</sup> Support mixed use development through neighborhood plans and zoning revisions.<sup>30</sup>
- Implement regulatory, programmable, and procedural affordable housing incentives;<sup>31</sup> creative funding strategies, public private partnerships, and density bonuses.<sup>32</sup>
- Establish interconnected neighborhoods. Develop neighborhood connectivity standards.<sup>33</sup>

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<sup>29</sup>LU Goal HN2, Policy HN2.1.

<sup>30</sup>Goal HN2, Policy HN2.1, Strategy HN2.1(a).

<sup>31</sup>LU Goal HN2, Policy HN 2.1, Strategy HN2.1(b).

<sup>32</sup>Goal HN1, Policy HN1.1 and HN1.2, Strategies HN1.1(a) & (b).

<sup>33</sup>LU Goal HN2, Policy HN2.2, Strategy HN2.2(a).

- Encourage accessory dwelling units.<sup>34</sup>

The ingredients of market affordability is implicit in the Specific Plan design. The Plan adopts mixed use development. It provides thirteen (13) different types of housing that covers a range of affordability. It also includes the use of Accessory Dwelling Units. And it blends the various housing products throughout neighborhoods in order to integrate neighbors into community and thereby gently discourage segregation on the basis of income.

### **Land Use Goal HN3**

**Development patterns designed to maintain the open character of rural areas, protect open lands, and protect and maintain sensitive environmental areas will be promoted.**

Approximately one-third of the Specific Plan area is proposed as public open space. While Bow & Arrow Wash is not a federally protected outside the floodway, the area is an environmental asset of the neighborhoods. Each sub-neighborhood is clustered<sup>35</sup> and the activity center allows for set aside of public open space. The public open space is smartly integrated into neighborhood design so that each pod or area has approximately equal access to the amenity.

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<sup>34</sup>LU Goal HN2, Policy HN2.3, Strategy HN2.3(a).

<sup>35</sup>LU Goal HN3, Policy HN3.1.



## V. TRANSPORTATION ELEMENT

The transportation elements of both the Regional Plan and the Juniper Point Specific Plan are complimentary. Specific Plan incorporates many of the desired system designs encouraged by the Plan, both internal to Juniper Point and external to the region. Internally, the transportation design favors narrower neighborhood streets and lanes, connects the sub-neighborhoods by means other than automobiles, and provides mass transit connections to greater Flagstaff. The point is to enhance the mobility opportunities and choices that residents have as defined in planning documents including the Regional Plan and also Flagstaff 2020 visioning statements.

Modeling is also based upon assumptions. The assumption made here is that Juniper Point will build out by 2015. This modeling assumption based upon a reasonable absorption rate for the project as a whole. Assumptions are also made with regard to the future development of adjacent land and land that might reasonably be expected to also use the traffic network in the future. It is also necessary to make assumptions about what the community will accept as a level of transportation service. Levels of acceptable service bear a large role in determining when improvements to the transportation system are warranted.

At full build out Juniper Point is expected to generate 11,290 total daily external trips, with 937 occurring at the A.M. peak hour and 1,015 trips occurring in the P.M. peak hour.<sup>36</sup>

The purpose for studying the traffic condition is to determine the nature and extent of traffic impacts upon the City's existing lane and

intersection system, and to suggest the level of improvements needed to compensate for impacts created by the project. The traffic study results in an understanding of traffic needs and recommended traffic improvements over time.<sup>37</sup> A matrix of street segments, improvements, dates and percentages of contribution are attached as an Appendix item. Costs are summarized there as well.

By full build-out in 2015, off-site improvements such as lane widenings will be required along the existing Lone Tree Road between JW Powell and Pine Knoll, and eventually from Pine Knoll to Butler Avenue. JW Powell will require widening from the New Lone Tree Road to Lake Mary Road. Intersections in these areas will eventually require improvements, including signalization at Lake Mary Road and JW Powell. For its part, signalization requires lane widenings for dedicated turning movements at this location. Other intersections, such as existing Lone Tree and JW Powell, will eventually require widening for dedicated turning lane movements, but will function effectively without signalization.

A proposed re-alignment of "New Lone Tree" to JW Powell will traverse mostly through the project area. Currently, the Council is considering adoption of a Lone Tree Corridor Study. The corridor study specifies the alignment and street type for Lone Tree across five sub-regions including the Plan area.

Developers of Juniper Point will ultimately assume responsibility for their proportionate share of development of New Lone Tree through Juniper Point in accordance with any adopted Lone Tree Corridor Study and by virtue of City Ordinance 1925. The roadway may be developed in stages. New Lone Tree will cross Bow and Arrow

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<sup>36</sup>Traffic Impact Analysis, Juniper Point, June, 2006, at p. 2.

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<sup>37</sup>For a more extended discussion of study objectives, see Traffic Impact Analysis, at p. 1.

Wash at grade.

The Lone Tree Corridor Study also contemplates an interstate interchange at I-40. Traffic impact analysis indicates that, if the interchange were built, residents within the Plan area will generate approximately eight percent (8%) of the daily use.

### ***Transportation Goal T1***

**A safe, convenient, user-friendly transportation system will be developed through the region, addressing both short- and long-term needs, and emphasizing alternative transportation modes while reducing dependency upon the automobile.**

Internally, the Specific Plan creates a balanced transportation system that de-emphasizes the automobile and encourages use of alternative transportation. The purpose is to provide mobility choices to meet residential needs.<sup>38</sup>

Of particular importance to the site layout is a re-consideration of standards for typical neighborhood streets. This is consistent with both the overarching policies of: (1) managing access to the transportation system;<sup>39</sup> (2) developing a traffic mitigation plan including traffic calming and speed reduction measures;<sup>40</sup> and (3) creating an efficient transportation system with facility design and roadway cross-section guidelines.<sup>41</sup> Specifically, the Regional Plan puts a "...particular emphasis on the neighborhood

feel of local streets, including consideration of narrower street standards".<sup>42</sup> Through adoption of the accompanying regulating plan and form-based code, street standards are adopted that ensure development of an efficient, connected roadway system that accentuates the features of the underlying TND.

To optimize TND transportation effects on internal street design it will become necessary to evaluate the City snow removal ordinance that prohibits overnight on-street parking during winter months. Effective snow removal in the midst of on-street parking can be accomplished through plowing streets to the center, acquiring snow removal equipment that can operate on parked streets, parking on alternating sides of the street on alternate weekdays, or privatizing the streets.

### ***Transportation Goal T2***

**An Enhanced public transit system will be promoted as an integral part of the region's overall transportation system.**

The Specific Plan incorporates a metro-stop for the Mountain Line bus system that acts as an activity center and focal point for the development.<sup>43</sup> It is conceivable that the line can expand to include NAU's internal bus transit system. The current Mountain Line buses provide hitches for bicycles and cyclists commuting by both means of transportation. The metro-stop is also an item of convenience for those who may be commuting to Coconino Community College within walking distance of the transit stop, but who also seek the convenience of related neighborhood commercial uses in a central activity area. This activity area will provide an additional stop along an integrated bus line that,

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<sup>38</sup>Transportation Goal T1, Policy T1.1.

<sup>39</sup>Transportation, Goal T1, Policy T1.6.

<sup>40</sup>Transportation, T1, Policy T1.4, Strategy T1.4(a).

<sup>41</sup>Transportation, T1, Policy T1.2, and Strategy T1.2(b) & (c).

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<sup>42</sup>Goal CD2, Policy CD2.2, Strategy CD2.2(a).

<sup>43</sup>Transportation, Policies T2.1, T2.2, T2.3



together, comprises the transit network system. Presently, the Northern Arizona Intergovernmental Public Transit Authority plans to service the CCC campus and neighborhoods through use of JW Powell, the main New Lone Tree and any connector to the campus, in either a north or south-bound route.

### **Transportation Goal T3**

**The region's development pattern will support a diverse range of transportation choices, including transit, walking and bicycling, as well as driving.**

Auto-oriented development patterns tend to sprawl and tend to support strip commercial projects. Juniper Point Specific Plan is designed as a single, compact, and whole community. It assures that the diversity of land uses have ready accessibility to all modes of transportation. The neighborhoods contain a vertical and horizontal mix of uses placing them close enough to services to permit walking and bicycling.<sup>44</sup> Pedestrian walkways are continuous and connected. Bicycles either co-exist within travel lanes at design speeds that accommodate slower paces,<sup>45</sup> or bicycle lanes are dedicated on the thoroughfares and uphill grades where needed. FUTS trail networks provide connectivity to those alternative routes.

### **Transportation Goal T4**

**The Region's transportation system will be developed and managed with attention both to supply-side (e.g. new roads) and demand-side strategies.**

Juniper Point's impacts to existing infrastructure

are mitigated through completion of phased improvements to the existing City traffic features at off-site locations. Expected improvements include lane additions on JW Powell and intersection improvements and traffic signalization at other key intersections described in the Traffic Impact Analysis provided in support of this Specific Plan.

New roadways internal to the project are proposed in such a manner as to promote Traditional Neighborhood Design. The form-based code contains the thoroughfare typologies for streets within the planning area. The regulating plan assigns those typologies to specific locations within the Plan area.

A thoroughfare no greater in intensity than a minor collector will be completed across the existing Coconino Community College site in order to provide traffic connectivity with the adjacent parcel, and to integrate a "flow-through" of traffic to existing Lone Tree. In addition, the New Lone Tree extension to Pine Knoll Drive is proposed for a phased completion, including an underpass design at Interstate 40. This new street alignment will be finalized upon Council approval of the preferred Lone Tree corridor route.

The off-site public improvements will be implemented through public-private development agreements. On-site public improvements will be addressed at platting and will be insured through the ordinary public assurance process.

As an alternative to standard development agreements and public assurances, it is foreseeable that a Community Facilities Improvement District [CFID] be formed for a sub-area of Flagstaff inclusive of this project and other properties, and for the purpose of completing the public infrastructure and public improvements contemplated by the Regional Plan and this Specific Plan.

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<sup>44</sup>Transportation Goal T4, Policy T1.4.

<sup>45</sup>Transportation T3, Policy T3.1, T3.2.

## VI. OPEN SPACE ELEMENT

The Regional Plan's urban open space plan focuses on those lands within the city limits and attempts to create an expansive, well-functioning open space system by combining public and quasi-public open space wherever reasonably possible and by encouraging appropriate and controlled integration of significant private open space. All components are combined to form a continuous, linked system. The Regional Plan recognizes that it is often difficult to define open space. As noted, in many cases vacant 'by-passed' lands within the city are considered and perceived as open space by city residents and travelers simply because they have not yet been developed. The urban open spaces plan is supported by Maps 5 and 6 of the Regional Plan, and seek to achieve the following:<sup>46</sup>

- Preservation of significant natural areas characterized by unusual terrain, scenic vistas, unique geologic formations, dense or unique vegetation, or wildlife habitat.
- The greenbelt principle; that is, the use of linear open space to define and control development of the city.
- Preservation of open space for recreational uses.
- Utilization of open space to prevent encroachment into floodplains.
- Utilization of open space lands for retention of aesthetic and recreational values.
- Preservation of open space for future land use needs.
- Provision for a maximum of open space for common use, which simultaneously compensates in open space for compact

building development.

- Utilization of open space lands as non-motorized transportation corridors between various land uses.
- Preservation of a "soft edge" to the city.
- Preservation of wildlife corridors.

The Regional Plan recognizes that open spaces can serve multiple purposes all at once.

Bow & Arrow Wash is identified in the Regional Plan as an area of significant hillsides and drainageways.<sup>47</sup> Regional Plan Map 5 notes a wildlife corridor traversing the bottom of the Wash, though it is somewhat discontinuous. Regional Plan Map 6 denotes an existing FUTS Trail at the bottom of the Wash, traversing the entire length of the property east-west. Regional Map 20 identifies a proposed Regional Park Facility within 0.5 miles of the southern entry into Juniper Point.

The city employs a level of service (LOS) calculation to provision of park and open space, the use of both is further divided into active parks and passive open space on a roughly 50/50 basis. The LOS calculation calls for 11.07 acres of park for every 1,000 residents.

With 1590 housing units and an average household size of 2.59, the total residential occupancy in the Specific Plan area is 4,118. The LOS yields 45.6 acres of parks which, if evenly divided between active and passive space, yields 22.8 acres of active parks and 22.8 acres of passive park. The areas devoted to active parks is depicted in the regulating plan and constitutes 415,722 square feet, or 9.54 acres. The raw amount of land dedicated to parks is not as significant as the distribution of parks throughout the Specific Plan area. 35 separate areas are indicated in the Regulating Plan as either pocket

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<sup>46</sup>Regional Plan, Open Space, Parks, Recreation & Trails Element, at p. 4-10.

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<sup>47</sup>Regional Plan, at p. 4-10.

parks or neighborhood parks or trailhead pockets and common viewshed preserve areas.<sup>48</sup> In addition thereto, the larger 100+ acres of dedicated open space with active FUTS trails and smaller social trails make for a complete and integrated open space and recreation component. The distribution of public spaces meets and exceeds the goals of the Regional Plan.

Dedication of the area comprising Bow and Arrow Wash in the T1 Transect achieves roughly five times the amount of sought-after passive open space. Active parks within the Specific Plan area are set in places that utilize view sheds and gathering space for a pocket park-like setting. The passive acreage also includes FUTS alignments which are known, popular active recreation trails for walking, hiking, running and cycling. As an integrated whole the project provides abundant park and recreation opportunities that exceed the LOS even if not equally divided between active and passive park.

#### ***Open Space, Parks, Recreation & Trails OSPR 1***

**The region will have a balanced system of open lands, natural areas, wildlife corridors and habitat areas, trails, greenways, parks and recreation facilities as guided by the Greater Flagstaff Open Spaces and Greenways Plan, the City of Flagstaff Urban Open Spaces Plan, the City's Long Range Master Plan for Parks, Recreation and Open Space, and County area Plan Open Space Objectives.**

The Specific Plan area is characterized, first and foremost, by the large swath of Bow & Arrow Wash, which bisects the property and is or will

be dedicated to public uses as Transect T1. Dedication of the area, with carefully crafted deed and conservation restrictions, will preserve the wildlife corridor traversing the Wash,<sup>49</sup> with the minor exceptions of any extension of new Lone Tree Road across the Wash<sup>50</sup> and the eastern secondary access needed for traffic recirculation through the project area, and with the exception of the sub-regional bio-retention and stormwater facilities identified in the regulating plan. The FUTS Trail in the Wash will be enhanced by extension of multiple social trail connections making the FUTS accessible from within the Plan area. The network of social and FUTS Trails provide connectivity between adjacent land uses as well, including networks that lead to the Community College, NAU, Lone Tree Road to the Downtown area, and even to the Big Box district at the end of Babbitt Way just north of I-40 and northeast of the Rio de Flag wastewater treatment facility.

Significantly, the regulating plan and Specific Plan Exhibits attached depict over one mile of FUTS Trails [5,953 linear feet] and four miles of secondary trails [21,485 linear feet].

The open canyon spaces between the neighborhoods provide the experience of an open space buffer between developed areas.<sup>51</sup> Active parks are interspersed within the neighborhoods. Finally, the Specific Plan area is located within a short walk or bicycle ride (0.5 miles) of the proposed Regional Park on south JW Powell. A combination of FUTS Trail and sidewalk provides the connection. The size of

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<sup>49</sup>OSPR Goal 1, Policy 1.7, Strategy 1.7(b).

<sup>50</sup>Lone Tree Road extension will not span the wash, but rather, will traverse the wash with an at-grade crossing. The return circulation in the eastern project area will likewise be an at-grade crossing.

<sup>51</sup>OSPR Goal 1, Policy 1.7, Strategy 1.7(a).

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<sup>48</sup>See: Regulating Plan, June 2006.

dedicated public spaces and active neighborhood parks relieves the Plan area of any conceived necessity to also produce (or reproduce) regional recreational facilities on-site.

Management of the total Open Space portfolio of active and passive parks can be accomplished by the City of Flagstaff through the Parks and Recreation Department. Alternatively, the City of Flagstaff can institute management policies that differentiate active parks from passive parks and manage the two facilities separately.

As an alternative, the passive open space can be donated to a non-profit conservation resource organization and managed as a public access nature area, with financial and perhaps volunteer support from the Juniper Point Homeowners Association and/or other non-profit, non-governmental entities. Active parks can be managed by the City of Flagstaff Parks & Recreation Department.

As a final alternative, the areas of both active and passive parks can remain private and managed by a homeowner's association.

In summary, the Plan area is well-appointed with open space and passive recreational opportunities. During the planning process citizen groups supported the scale of preservation and dedications being considered here. Development of active parks are provided on a pocket or neighborhood basis. Regional facilities for expanded and organized recreation are planned nearby.



## **VII. COMMUNITY CHARACTER & DESIGN.**

### ***Community Character Goal CD1***

**A sense of connection will be maintained in the built environment to the region's natural setting and dramatic views.**

The predominant feature of the land is Bow & Arrow Wash, forming a canyon that traverses the property from the southwest to the northeast. This feature defines the character of the site.<sup>52</sup> The Regional Plan identifies a FUTS Trail and wildlife corridor in this area,<sup>53</sup> and asks that development retain these features.<sup>54</sup> The Specific Plan preserves this canyon feature as well as accentuates its passive use for neighborhood recreational opportunities and spiritual refreshment.<sup>55</sup> Through assignment of the T1 Transect, the regulating plan sets firm boundaries for non-disturbance of steep slopes.<sup>56</sup> The focal points of entry to and exit from the canyon while on the FUTS Trail is undisturbed with the exception of two road crossings of the wash; one by Lone Tree Road and the second by a crossing to the east. Otherwise there are no further street crossing of the canyon and the only other access to this open space area is by trail.

The regulating plan, site layout and form-based code together allow for visual access to the significant views to be enjoyed from the site.

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<sup>52</sup>Goal CD1, Policy CD1.2.

<sup>53</sup> Regional Plan, Maps 5 & 6.

<sup>54</sup>Goal CD1, Policy CD1.4.

<sup>55</sup>Goal CD1, Policy CD1.1, Strategy CD1.1(a).

<sup>56</sup>See Juniper Point Regulating Plan. See also: Goal CD1, Policy CD1.3.

Importantly, the Plan provides visual access with priority paid to the public realm. Many neighborhood streets are oriented north and south for viewshed accessibility. The predominant east-west street in NBHD 3 has no buildings on the north side of the street near an important ridge line, but rather, a linear park allows complete viewshed access of the Peaks to buildings on the south side of the street facing north and for pedestrians traversing the sidewalk adjacent to the park.<sup>57</sup> Many other subtle examples of viewshed access are interspersed throughout the design of NBHD 3 and each other neighborhood design. This is accomplished in the regulating plan through site location and street orientation. The form based code compliments site layout with emphasis upon the natural environment in the Transect T1 and T2 areas, and through landscaping and design standards.<sup>58</sup>

### ***Community Character Goal CD2***

**The Flagstaff region will continue to protect its unique character that reflects its forested setting of ponderosa pine trees, pinion and juniper vegetation, and meadows through quality design and development. Emphasis will be placed on quality design in both the public realm - streets, civic buildings, and other public spaces - as well as the private realm - commercial buildings, work places and housing. Preservation of vegetation and wildlife are part of the quality design and development process.**

The Goal requires development to blend harmoniously with the natural environment through thoughtful design. This is a significant challenge when a project is also presented with difficult

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<sup>57</sup>See: Regulating Plan, NBHD 3.

<sup>58</sup>See: Regulating Plan. See also: Goal CD1, Policy CD1.1, Strategy CD1.1(c).

topography and mandatory minimum densities. The proper response is Traditional Neighborhood Design, which the Specific Plan provides. Through TND principles, and coupled with the regulating plan and form-based zoning code, the project is custom-fit to the unique features of the site to produce an average unit density of eight (8) ua., while also setting aside approximately one-third of the site (more than 100 acres) to preservation of one form or another. The project does so through strict control of street scape, building type, mixed uses and landscaping that incorporate both private and civic buildings at visible focal points. The planning is specific, and the result is an integrated plan for a whole community that balances private and public necessities, and in a way that enhances efficiency of infrastructure and land use yield.<sup>59</sup>

A fundamental tenet of TND is to promote use of sustainable design technologies. The regulating plan and form-based code encourage sustainable design features including consideration of efficient materials, passive and active renewable energy features, and use of sustainable technologies.<sup>60</sup> These design standards are apparent in Chapter 4 of the form based code.

It also bears repeating that the Regional Plan puts "particular emphasis" upon consideration of narrower street standards in order to promote community character.<sup>61</sup> The form based code proposes special thoroughfare sections that de-emphasize pavement in favor of broader

parkway and sidewalk. The Plan promotes particular streetscapes as part of an integrated and harmonious whole-neighborhood design.

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<sup>59</sup>See: Goal CD2, Policy CD2.2, Policy CD2.3, Policy CD2.5, and Strategies CD2.5(b) thru (c), and (h).

<sup>60</sup>Goal CD2, Policy CD2.6, Strategy CD2.6(a). Compare with Regulating Plan and form-based code for Juniper Point.

<sup>61</sup>Goal CD2, Policy CD2.2, Strategy CD2.2(a).

## VIII. NATURAL & CULTURAL RESOURCES AND ENVIRONMENT ELEMENT.

### *Resource Goal NCR1*

**High standards will be maintained for protection and improvement of the region's quality of life offered by its natural and cultural, historic and archeological resources and its natural environment.**

The Specific Plan's form based code is drafted as a conservation code.<sup>62</sup> It emphasizes Environmental Standards for each Transect that is depicted in the regulating plan. Specifically, Chapter 5 of the Code provides that:

"Environmental Standards for transects provide that more natural environment shall have priority in the more rural zones (T1-T2), and the more urban environment shall have priority in the more urban zones (T3-T5). Buildings in the T1 Zone and the T2 Zone are generally prohibited, and shall only be permitted by Variance. Thus, the T1 and T2 Zones establish priority of the natural environment in these locations. Urbanization in the T3 through T5 zone provide for the creation of streetscapes in the public realm, with landscaping acting as a form of compensation for the removal of ordinary tree resource in these locations."

There are detailed restrictions in the T1 and T2 transects that preserve and protect the environment,<sup>64</sup> and there are overarching

regulations that preserve, where practical, ponderosa pines of diameters greater than 22 inches, junipers, gambel oak stands, unique rock outcroppings, and outcroppings with vegetation.<sup>65</sup>

Biological, archeological and natural drainage/floodplain studies of the Planning Site are prepared by SWCA Environmental Consultants, of Flagstaff, Arizona. The studies inventory potentially valuable natural assets and mitigate development impacts, if necessary. The study results are incorporated as a separate submission.

Through the planning process, careful consideration was taken to investigate special status species of Coconino County. No special status species were observed within the project area. The area does not contain habitat for any federally listed threatened, endangered, proposed and candidate species. The species with the nearest potential habitat is the Mexican spotted owl, however, the project area does not contain the habitat elements to support this species.<sup>66</sup>

There are 1.47 acres of potentially jurisdictional waters of the United States, consisting of the Bow & Arrow Wash floodway.<sup>67</sup> There are roughly 10 total acres of floodplain within the Wash.<sup>68</sup> The

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<sup>65</sup> See: form based code, Chapter 5, Section 5.6.

<sup>66</sup> Biological Evaluation of 325 Acres for the Proposed Juniper Point Development, SWCA Environmental Consultants, April 26, 2006.

<sup>67</sup> Determination of Potentially Jurisdictional Areas for the Juniper Point Property, SWCA Environmental Consultants, April 10, 2006.

<sup>68</sup> At the time of Specific Plan adoption the Army Corps of Engineers has not finalized the limits of jurisdictional waters. From a preservation standpoint all waters will be contained within Transect T1. The extent of jurisdictional waters will carry special consideration

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<sup>62</sup> Form based code, at Chapter 5.

<sup>63</sup> For example, see form based code, at sections 3.3.6(a), 3.4.6(a), and 3.5.6(a).

<sup>64</sup> See: form based code, Chapter 5, Sections 5.3 & 5.4.

relatively minimal floodplain encumbrance is due in large part to the fact that the canyon is rather steep and the channel is correspondingly narrow. There are drainages leading into the Wash. The Regional Plan identifies the Bow & Arrow Wash as a candidate for a "Regional Detention Facility" and also a candidate for a "Flood Control Project" with level of service D and E.<sup>69</sup> However, the deficient levels of service exist in the Bow & Arrow neighborhoods developed to the west of the Planning area in the 1960's and 70's or earlier. The Regional Plan identifies PRA's as candidates for sub-regional drainage infrastructure.<sup>70</sup> On-site drainages create the opportunity or potential for sub-regional drainage solutions to post-development storm flows. The City also has a stormwater utility which can commission regional drainage work in any dedicated public spaces not encumbered by development restrictions.

The Regional Plan makes specific comments encouraging development of a stormwater "system" for the city to address flooding risk to the community when the community is at full build-out.<sup>71</sup>

The Specific Plan area and the Form Based Code incorporates Low Impact Development (LID) techniques for the reduction and management of stormwater runoff. Specific techniques under consideration include minimizing impervious surfaces through reduction in street widths and the potential use of permeable pavers in places, use of grassed swales, bio-retention basins to slow the rate of

stormwater runoff and provide runoff water quality enhancement. Many of these practices will be incorporated into the actual design and construction of infrastructure and landscaping improvements. There are a variety of goals within the Regional Plan that support this kind of ecosystem planning.<sup>72</sup> Additionally, the regulating plan illustrates potential bio-retention areas available for supplemental mitigation to hold post-development runoff rates to their pre-development levels.

With regard to archeology, while there is assorted debris on site as a result of numerous and rather continuous public trespass, there are no items of archeological or cultural interest.<sup>73</sup>

The Planning area has a completed stewardship program approved by City of Flagstaff, removing thickets and trees that represent wildfire fire hazards.<sup>74</sup> With the exception of the canyon itself, this treatment has significantly reduced wildfire hazards. There are no known "noxious weeds" that pose a threat to the community in either the pre- or post-development state.

Through the regulating plan, form based code, and site layout, the Planning area's natural systems - lying mainly within the Wash but also in the drainages and hillsides - are conserved and integrated into the passive open spaces. Development is located in areas suitable for a built environment, and clustered in higher

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during installation of streets and municipal infrastructure.

<sup>69</sup>Regional Plan, at p. 6-15 and 6-16.

<sup>70</sup>Regional Plan, at p. 6-16.

<sup>71</sup>Regional Plan, Natural and Cultural Resources and the Environment, Stormwater System, at p. 6-13 - 6-14.

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<sup>72</sup>NCR Goal 1.1, Policy 1.12, strategy 1.12(a); Policy NCR 1.16; Policy NCR 1.17.

<sup>73</sup>Archeological Report, SWCA Environmental Consultants, April, 2006.

<sup>74</sup>Goal NCR 1.1, Policy NCR1.14, Strategy NCR 1.14(a); Policy NCR 1.19(a & b).

densities, allowing for set-aside of natural open space.<sup>75</sup>

The property lies within astronomical Zone II,<sup>76</sup> and all development shall conform to lighting requirements as specified in the Land Development Code. Lumens will be averaged across the 320 acre site, and concentrated within the individual neighborhoods in such a way as the total lumen budget will not exceed the entitled lumen count.

## IX. WATER RESOURCE ELEMENT

The Regional Plan does not specify Goals, Policies or Strategies for Water Resources. Nonetheless, there is significant discussion in the Plan regarding present and future water needs for the municipal water system. As per the Regional Plan, there is sufficient capacity to service projected annual water use through the year 2020 and beyond.<sup>77</sup> The question is one of distribution and levels of service.

The water and sewer impact analysis prepared by the City Utilities Department identifies load and system requirements. The Executive Summary is attached as an Appendix. Noteworthy is the fact that main lines for water and wastewater exist in the Bow & Arrow Wash. The Rio de Flag wastewater treatment plan is near the eastern parcel boundary.

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<sup>75</sup>Goal NCR1.1, Policy NCR1.16, Strategy 1.16(a).

<sup>76</sup>Land Development Code, Illustration 10-08-002-0004.

<sup>77</sup>Regional Plan, at 7-5, Figure 1.

A. Sewer. At build-out the total average sewer flows will equal approximately 440,000 gallons per day, with peak sewage flows of 883,200 gpd. As a result modifications to the existing sewer system are required. They include up-sizing sewer lines along Country Club Golf Course (815 ft.) and Elden Hills Golf Course (681 ft.). The City may participate in any oversize requirements, or a recapture agreement may be utilized to recover improvements that exceed Juniper Point's proportionate share. It is also possible that other developments ahead of Juniper Point will complete the upsize. There is adequate sewage plant capacity at the Wildcat Hill Wastewater Treatment Plant to serve the proposed development. Attached exhibits provide a schematic illustration of a typical sewer collection system that could be expected to serve the Plan area. Treatment capacity at wastewater plants is on a "first come first serve" basis.<sup>78</sup> Remaining sewer improvements are straightforward and summarized in the WSIA.

For sewer collection and treatment, Juniper Point may have to provide a Public Utility Easement (PUE) to tie the Rio Homes sewer main to the sewer trunk line in Bow & Arrow Wash. The operative may is used because the City has not yet made the final determination to cross both I-40 east-and west-bound with this sewer main vs. locate the main in the median of I-40.

B. Water. At build out the total domestic water demands will average 600,000

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<sup>78</sup>Regional Plan, at p. 7-11 thru 7-13.

gallons per day, or 416.4 gpm. Peak water demand is anticipated to be 1,500,000 gallons per day, or 1041.0 gpm. The area's main source of water is the Lake Mary Water Treatment Plant located approximately 1.5 miles southwest of the project. The project can be supplied with Zone B water. Two sources of Zone B water can be supplied from the existing water transmission main located within the project. The City, however, states that it cannot provide the water demanded of the project and that the developer is required to construct a well or multiple wells necessary to meet the development's average daily usage. The City will require the developer to dedicate the wells to the City. The minimum amount of water the well system must produce is 416 gallons per minute. Each well in any system of wells must produce a minimum of 200 gallons per minute.

Additionally, upon development the property owner must construct a storage tank to store 780,000 gallons of water deemed necessary to service the development, along with operation and maintenance expenses for 20 years. Typically, however, the City will likely request a 1,000,000 gallon tank and participate in the difference in the cost of the over-size. Exhibit C provides a schematic illustration of a typical water distribution system that could be expected to serve the Plan area.

- C. Reclaimed Water. The WSIA assumes the project will contain 40 acres of regional parks using 120,000 gallons of reclaimed water per day. For reclaimed water (RW) conveyance and supply,

Juniper Point will connect to existing mains located at Lonetree Road and Zuni Drive and ultimately connecting to the reclaimed system near the Rio de Flag wastewater treatment plant. The attached Exhibit D provides a schematic illustration of a typical reclaimed water distribution system for the Plan area.

## **X. COMMUNITY FACILITIES AND SERVICES ELEMENT**

### ***Community Facilities and Services Goal CFS1***

**Infrastructure and public services will be provided in an efficient, equitable and effective manner.**

By virtue of its PRA-7 designation, the Planning area is deemed suitable for higher density urban development. It lies within UGB Stage 1 and it has easy access to water and sewer mains in Bow & Arrow Wash. New Lone Tree Road will re-align through the project area, inclusive of a Traffic Interchange at I-40. JW Powell is also projected to encircle the southeast quadrant of the City, and all portions of JW Powell occur within UGB Stage 1.<sup>79</sup> The public facilities and services which the area requires will be provided in conjunction with development and will coincide in time with any proposed phasing or staging of the build-out.<sup>80</sup> The precise requirements will be a consideration of any rezoning and development agreements. Facilities will likely be installed contemporaneous with subdivision platting. The costs will be apportioned at a later date in an equitable and effective manner.

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<sup>79</sup>Regional Plan, Map 4, Map 7, Map 8.

<sup>80</sup>Goal CFS1, Policy CFS1.1, Strategy CFS1.1(c).



## Policy CFS1.2

**"Development shall pay its fair share toward the cost of additional public service needs created by new development, while giving consideration to the rational nexus provisions to show direct benefit."**

Implementing an infrastructure program requires the use of various tools, methodologies and programs to determine the cost of development and that development pay a fair share of those costs in direct proportion to benefits enjoyed and burdens imposed (by development). An assignment of a fair share of the cost for public service needs created by development will be apportioned to the developers according to rational nexus provisions as stated in the Policy. This includes apportionment for traffic improvements that provide a direct benefit to the Planning area.

In addition, in the event impact fees for new development are established by the City, then those fees that apply will be incurred by developers, with the exception of any valid waivers or set-offs (for affordable housing and work force housing) or development incentives established through development agreements. The Regional Plan encourages the use of incentives to achieve certain types of development. Incentives can take the form of compensation for development impacts. Such incentives are encouraged at Juniper Point.

Other forms of funding techniques may be instituted to accomplish regional planning objectives. Specific cost burdens to the City identified to date are:

- 1) City will pay for any well production capacity over and above that required for the Juniper Point project.
- 2) City will pay for excess water storage capacity that would exist in tanks

constructed in Juniper Point if this excess capacity is determined to be in the City's best interest.

As with other projects, there is a delicate balance between the Capital Improvements Budget for Regional Improvements and development exactions that bear a nexus to development impacts. Regular monitoring of this relationship is consistent with Regional Plan Policy CFS 1.2

Public education facilities are nearby to the Planning area. Coconino Community College will be smartly pulled into the design of the northwest neighborhood NBHD 1<sup>81</sup>, integrating the two adjacent land uses while keeping the identities of the two projects distinct. This area can conceivably accommodate a focal point for public transportation and student and faculty housing and campus activities.

Northern Arizona University is nearby, and Juniper Point can service the University with faculty housing and student housing opportunities through the same public transit focal points, and by bicycle and trail connections. A civic use site in the Regulating Plan is considered for a charter school location.<sup>82</sup> Flagstaff Unified School District population rates have been relatively flat or declining. FUSD is not requesting a school site dedication.

While the Plan area does not share a common boundary with USFS National Forest lands, Section 35 shares a corner-point with the southeast corner of the project area. Walnut Canyon National Monument is several miles due east of the site.

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<sup>81</sup>See: Regulating Plan, NBHD1.

<sup>82</sup>Regulating Plan, pad 31-1, Civic Use.

## **XI. PUBLIC SAFETY ELEMENT**

Public Safety is a consideration within the Community Facilities element of the Regional Plan. It is anticipated that additional police and fire services will be required as a result of development. The Plan area represents approximately 4118 new residents and 1590 new residential structures, plus any additional commercial and civic facilities. A discussion on dedicating a fire sub-station will be considered. Presently, Lot 43-1 within HBHD 3 (Neighborhood 3) seems suitable when NBHD 3 is phased and scheduled for development. The specific location that is acceptable to the fire department will depend on a variety of departmental factors, such as access and response times. This discussion can occur during the planning approval process, rezoning and development agreements, phasing and subdivision platting.

Currently, Police dispatch from a central facility located north on Lone Tree Road. No additional sub-station requests are anticipated.

## **XII. CONCLUSION**

The Juniper Point Specific Plan provides for the orderly development of the area described in the Juniper Point regulating plan. The regulating plan and form based code are the governing documents for Juniper Point. This Specific Plan provides further guidance in the instance there is a need to understand goals and policies. Together these documents and the attached materials guide the orderly development of the area of their jurisdiction. The Specific Plan, regulating plan and form based code may be amended from time to time to meet the continuing needs of the Planning Area.

Amendments will occur in accordance with the provisions of the City of Flagstaff Land Development Code and City Ordinances.

APPROVED AND ADOPTED BY RESOLUTION  
#\_\_\_\_\_, ON THE \_\_\_\_ DAY OF  
\_\_\_\_\_, 200\_\_.

\_\_\_\_\_  
Mayor, City of Flagstaff, Arizona

ATTEST:

\_\_\_\_\_  
City Clerk

APPROVED as to form and powers, this \_\_\_\_ day  
of \_\_\_\_\_, 200\_\_.

\_\_\_\_\_  
City Attorney  
City of Flagstaff

**APPENDIX**  
**INFORMATION SUMMARY**

### INFORMATION SUMMARY<sup>1</sup>

| <u>Parcel Numbers:</u> | <u>Acres</u> | <u>Total Gross Acres</u> | <u>Current Zoning</u> |
|------------------------|--------------|--------------------------|-----------------------|
| APN #104-14-001B       | 93.9         | 318.65                   | RR 5;                 |
| APN #104-14-003C       | 224.75       |                          | 1 unit per 5 acres    |

#### Proposed Land Use Distribution By Acres:

|                               |              |
|-------------------------------|--------------|
| Commercial                    | 8.41 acres   |
| Active Parks                  | 9.54 acres   |
| Non-residential Public Spaces | 105.00 acres |
| Medium Density Residential    | 185.70 acres |
| Low Density Residential       | 10.00 acres  |

Total Proposed Residential Units: 1590 units on 570 lots; in Four distinct neighborhoods. Ancillary Units (ADU's) estimated at 480 additional units.

Total Minimum Units Required (in PRA): 1369.90 units.

Estimated Residents: 4118 (1590 units x 2.59 per unit)

#### Thirteen Housing Types and Quantity by Unit:

|                  |               |                       |                 |
|------------------|---------------|-----------------------|-----------------|
| Cottage (57)     | House (65)    | Large House (132)     | Estate (20)     |
| Compound (6)     | Rowhouse (34) | Livework (94)         | Duplex (46)     |
| Courtyard (168)  | Mansion (632) | Apartment House (216) | Mixed Use (112) |
| Corner Store (8) |               |                       |                 |

#### Square Footages of Lots Devoted to Mixed Use (by category):

|                       |         |              |
|-----------------------|---------|--------------|
| Mixed Use Lots:       | 114,248 | (2.62 acres) |
| Corner Store Lots:    | 29,751  | (0.68 acres) |
| Office Building Lots: | 54,707  | (1.26 acres) |
| Civic Building Lots:  | 53,776  | (1.23 acres) |

Total Mixed Use Commercial 252,482 sq. footage of Lots; (8.41 acres).

Price Range For Workforce Housing: 75% of housing stock offered in a range indexed to the area median home sale price (currently \$356,000.00); or currently ranging between \$285,000.00 and \$534,000.00.

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<sup>1</sup>These figures are approximations. Specific terms such as "non-residential" and "public spaces" are as utilized in the Narrative.

Additional Traffic Trips at Build-Out (2015):\* 11,290 external trips.

A.M. Peak Hour: 937 trips.

P.M. Peak Hour: 1,015 trips.

\*Developer required to complete proportionate share of off-site improvements. See Appendix.

Trail Improvements: Linear Feet of FUTS Trails: 5,932 ft.

Linear Feet of social trails: 21,485 ft.

Area of Dedicated Floodplains: 10.00 acres of floodplain.

1.47 acres of jurisdictional waters

Water Consumption (in gallons):\* 600,000 domestic, per day average. [416.4 gpm]

1,500,000 domestic, peak demand.

780,000 gallon storage tank required

\*Developer required to provide a municipal well producing 416.4 gpm.

Wastewater Production (in gallons):\* 440,000 per day, average.

832,200 peak flow.

\*Capacity exists in wastewater treatment plants. Developer required to improve sewer lines.

Estimated Reclaimed Water Use (in gallons):\* 120,000 per day (in season).

\*Developer required to construct on-site utilization network.

Estimated Total Public Improvement Costs At Build-Out:\* \$38,971,100.00

Break Down (See also Appendix 1):

Developer On-sites: \$18,852,600.00

Developer Proportionate Share Off-sites: \$15,312,900.00

City Proportionate Share: \$ 4,805,600.00

\*Estimates do not include off-site construction of the Lone Tree Interchange. Developer's proportionate share use of the desired interchange is eight-percent (8%).

**APPENDIX**

**REVISED TABLE 2  
REGIONAL PLAN  
*Existing Private Land use and Acreage***

Table 2: Existing Private Land Use and Acreage

| Land Use Category<br>(Private Lands)   | Total<br>FMPO<br>(Acres) | Percent<br>of Private<br>Land<br>(FMPO) | City of<br>Flagstaff<br>(Acres) | Percent of<br>Private<br>Land (City) | County<br>FMPO<br>(Acres) | Percent of<br>Private Land<br>(County) |
|--|--------------------------|---|---------------------------------|--------------------------------------|---------------------------|--|
| Very Low-density<br>Residential  | 17561.4                  | 36.9%                                   | 57.8                            | 0.3%                                 | 17503.7                   | 58.6%                                  |
| Low-density<br>Residential   | 2383.3                   | 5.0%                                    | 2355.1                          | 13.5%                                | 28.1                      | 0.1%                                   |
| Medium Density<br>Residential  | 667.9                    | 1.4%                                    | 478.7                           | 2.8%                                 | 189.1                     | 0.6%                                   |
| High Density<br>Residential  | 400.1                    | 0.8%                                    | 400.1                           | 2.3%                                 | 0                         | 0.0%                                   |
| Commercial Medical   | 10.3                     | 0.0%                                    | 9.3                             | 0.1%                                 | 1.0                       | 0.0%                                   |
| Commercial Neighborhood  | 36.6                     | 0.1%                                    | 32.8                            | 0.2%                                 | 3.8                       | 0.01%                                  |
| Commercial Office  | 38.6                     | 0.1%                                    | 27.8                            | 0.2%                                 | 10.8                      | 0.04%                                  |
| Industrial   | 1891.0                   | 4.0%                                    | 1147.3                          | 6.6%                                 | 743.7                     | 2.5%                                   |
| Institutional  | 3596.5                   | 7.6%                                    | 2657.6                          | 15.3%                                | 938.8                     | 3.1%                                   |
| Parks  | 1367.0                   | 2.9%                                    | 992.0                           | 5.7%                                 | 375.0                     | 1.3%                                   |
| Open Space   | 617.3                    | 1.3%                                    | 459.7                           | 2.6%                                 | 157.6                     | 0.5%                                   |
| Right of Way   | 2342.0                   | 4.9%                                    | 2324.0                          | 13.4%                                | 0                         | 0.0%                                   |
| Undeveloped  | 16664.6                  | 35.0%                                   | 6444.6                          | 37.1%                                | 9901.4                    | 33.0%                                  |
| <b>Total Private Lands</b>   | <b>47576.6</b>           | <b>100.0%</b>                           | <b>17386.8</b>                  | <b>100.0%</b>                        | <b>29853.0</b>            | <b>99.8%</b>                           |
| * Original table stated incorrect totals of 48375.2, 18411.9, and 29964.2, respectively. |                          |   |                                 |                                      |                           |  |



**APPENDIX**

***Water and Sewer Impact Analysis  
Summary***

## II. ANALYSIS SUMMARY

### **On-site modifications:**

**Sewer:** Currently there is no infrastructure in the ground to support this development, so all systems will have to be designed and built.

**Water:** Currently there is no infrastructure in the ground to support this development, so all systems will have to be designed and built.

**Reclaim Water:** Currently there is no infrastructure in the ground to support this development, so all systems will have to be designed and built.

### **Off-site modifications indicated by the analysis are:**

**Sewer:** Based upon the City of Flagstaff Sewer Interceptor model and the attached analysis, **off-site sewer improvements will be required.**

**Water:** Based upon the City of Flagstaff water model created, **off-site water improvements will be required.**

**Reclaim Water:** Off-site water improvements will be required. The City of Flagstaff will install 3400' of 12" PVC in order to serve this site with reclaimed water.

**APPENDIX**

***Traffic Impact Analysis  
Executive Summary***

## EXECUTIVE SUMMARY

This report documents a traffic impact analysis performed for a mixed use master planned development consisting of low density, medium density, and high density residential, commercial, employment, municipal, and park land uses. The Juniper Point development is located in Flagstaff, Arizona, south of I-40, north of John Wesley Powell Boulevard and east of the new Lone Tree Road proposed alignment. The development falls within the current City of Flagstaff planning area (PRA 7), and includes approximately 300 acres of undeveloped land.

Civtech Inc. has been retained by MJN Enterprises, Inc. to perform the traffic impact analysis for the proposed Juniper Point development during the Development Master Planning (DMP) process.

The purpose of this study is to address traffic and transportation impacts of the proposed development on the surrounding streets and intersections. This traffic impact study was prepared based on criteria set forth by the City of Flagstaff. The specific objectives of the study are:

1. To evaluate lane requirements on all existing roadways and at all existing intersections within the study area.
2. To determine future level of service for all proposed major intersections within the study area and recommend any capacity related improvements.
3. To determine necessary lane configurations at all major intersections within the proposed development to provide acceptable future levels of service.
4. To evaluate the need for future traffic control changes within the proposed development.
5. To evaluate entry spacing along access controlled corridors.
6. To evaluate the need for auxiliary lanes at stop and signal controlled intersections.
7. To determine a need or benefit by adding an additional lane on John Wesley Powell Boulevard.
8. To determine a need or benefit by adding a new (or expanding the old) Lone Tree Road underpass of I-40.
9. To determine a need or benefit by adding the Lone Tree Road traffic interchange.

This study evaluates three horizon years, 2010, 2015 and 2025. It was assumed that a portion of Juniper Point would be constructed by 2010 with full buildout occurring by 2015. The entire site was evaluated in a build out condition for the 2025 horizon year with an enhanced roadway network including the Lone Tree traffic interchange, completion of John Wesley Powell to 4<sup>th</sup> Street and capacity related improvements on arterial roadways.

The development is proposed with 1,648 dwelling units of mixed residential uses. Of these, 374 will be single family residential, 175 will be townhouse/multi-family residential and 1,099 will be apartment/multi-family residential. The development also includes

commercial/retail and office uses. As a result, the development will attract both residential and employment related trips.

The proposed development is expected to generate 11,290 total daily external trips at buildout, with 937 occurring in the AM peak hour and 1,015 occurring in the PM peak hour. To ensure that the estimate of traffic impacts is conservatively calculated, it is assumed that the development will attract 100 percent of its trips upon buildout in 2015 using the existing street network.

The proposed development will be accessible from central Flagstaff via Route John Wesley Powell, Lake Mary Road and Lone Tree Road. John Wesley Powell will serve as the primary roadway connection for regional access. The new Lone Tree Road alignment will be constructed with this development and will allow access through the adjacent community college.

## CONCLUSIONS

The following conclusions have been noted in this study:

### Existing Condition

The intersection of Lake Mary Road and John Wesley Powell Boulevard fails in the AM and PM peak hour due to the high average delay of vehicles on John Wesley Powell Boulevard. The intersection of Lone Tree Road and John Wesley Powell Boulevard also experiences a failing level of service due to delayed vehicles on Lone Tree Road. These intersections will need to be mitigated in the future in order to improve the failing levels of service.

### General

Similar to the traffic model prepared by the FMPO, calculations performed using ITE Trip Generation Methodology equated to just over 11,000 daily external trips from the Juniper Point development. This includes a reduction for mode transfer related to traditional neighborhood design, a reduction for trip interaction internal to the development, and a reduction due to the number of anticipated second homes within the development.

This traffic study has been prepared for the overall Development Master Plan of the Juniper Point development. An updated traffic impact analysis should be completed with each phase of development to determine the timing of signal warrants, addition of deceleration lanes, new queue storage lengths, internal roadway configuration and geometry and assist with future sight distance issues.

### **2004 Roadway Segment Analysis and Comparison**

The 2004 transportation network model prepared by the FMPO uses the existing roadway network with the addition of the Juniper Point development at full buildout. Results of the segment capacity comparison analysis indicate that all roadways will operate with a capacity less than 1.0 under this scenario. A capacity less than 1.0 indicates that the number of lanes provided for traffic can accept the anticipated daily traffic volumes shown within the transportation model. The exception to this is the Old Lone Tree Road segment from Zuni Drive to I-40. The analysis completed for this segment indicates that remaining in the existing 2-lane configuration; traffic would surpass the roadway capacity.

### **Buildout Roadway Segment Analysis and Comparison**

The Old Lone Tree Road segment from Zuni Drive to I-40 operates with a capacity of 1.0 in the buildout transportation model. There is no net increase in capacity resulting from the construction of the Juniper Point development in the buildout year; the results indicate that the capacity is 1.0 without the addition of Juniper Point and remains a 1.0 once Juniper Point is constructed.

John Wesley Powell Boulevard between the Old Lone Tree Road alignment and the eastern most site entrance will operate at a capacity greater than 1.0 in the buildout transportation model. The increase from 1.11 to 1.17 without Juniper Point versus with Juniper Point indicates that this segment of roadway will fail without the construction of the Juniper Point development. Addition of a second through lane will improve capacity to a v/c less than 1.0

Old Lone Tree Road from Pine Knoll to Butler Avenue will operate at a capacity greater than 1 both with and without the Juniper Point development. Without the Juniper Point development, results of the analysis indicate a capacity of 1.07. Once the Juniper Point development is added, the capacity increases to 1.14.

The segment of New Lone Tree Road from I-40 to Pine Knoll Drive (the approximate connection with Old Lone Tree Road) will operate near capacity at 0.93. This roadway was evaluated with 2 lanes in each direction of travel.

New Lone Tree from the Juniper Point entrance to I-40 will operate at a capacity of 0.96 at buildout. This roadway was evaluated with 2 lanes in each direction of travel. The capacity level increased from 0.66 to 0.96 with the addition of Juniper Point.

### **2010 Intersection Analysis and Comparison**

The intersection of Lake Mary Road and John Wesley Powell Boulevard requires signalization in the year 2010 to reduce the high average delay experienced by vehicles

on John Wesley Powell Boulevard. In order to signalize the intersection, it is necessary to add exclusive right and left turn lanes to the southwest and northeast legs of Lake Mary Road, and an exclusive left turn lane on northwest leg of John Wesley Powell Boulevard. It is not desirable to mitigate this intersection without a signal because an additional shared through-right lane on the southwest leg on John Wesley Powell Boulevard would be necessary for the intersection to operate at a level of service D or better.

The intersection of Lone Tree Road and John Wesley Powell Boulevard also needs to be mitigated in the year 2010 in order to improve the overall level of service from an F to a D in the PM peak hour. The intersection will operate at a level of service C if an exclusive left turn lane is added on the northeast leg of Lone Tree Road and exclusive right and left turn lanes are added on the east and southeast legs of John Wesley Powell Boulevard.

### **2015 Intersection Analysis and Comparison**

The intersection of Lone Tree Road & John Wesley Powell Boulevard experiences a failing level of service in full buildout due to high average delay experienced by the vehicles on Lone Tree Road. The installation of a signal will improve the failing level of service to a level of service C in the AM and PM peak hours. The intersection of Lake Mary Road and John Wesley Boulevard experiences a failing level of service due to the high average delay on Lake Mary Road. The level of service will improve from an F to a C if the north- and southbound approaches are widened to two through lanes.

### **2025 Intersection Analysis and Comparison**

All existing intersections operate at a level of service D or better in the year 2025 with the lane configurations and stop control recommended in the year 2015. The future intersections of Fourth Street and Butler Avenue and Fourth Street and Interstate 40 warrant signals in the year 2025 due to the high AM and PM peak hour volumes at all approaches. For the intersection of Fourth Street and Butler Avenue, the north- and southbound approach should consist of two through lanes, one exclusive left turn lane and one exclusive right turn lane. The east- and westbound approaches should have one through lane, one exclusive left turn lane and one exclusive right turn lane. The north-, south- and eastbound approaches of the intersection of Fourth Street and Interstate 40 should consist of two exclusive left turn lanes, one through lane, and one shared through-right turn lane. The westbound approach should have one exclusive left turn lane, one through lane, and one shared through-right turn lane.



***APPENDIX***

**Engineer's Opinion of Quantities  
and  
Probable Cost of Construction**

Juniper Point  
General Plan Amendment/Schematic Phase  
ENGINEER'S OPINION OF QUANTITIES AND PROBABLE COST OF CONSTRUCTION  
JULY 24, 2006 JOB NO. 05171.002



|  | 2008<br>Developer<br>Cost | 2008<br>City<br>Cost | 2009<br>Developer Cost | 2009<br>City<br>Cost | 2010<br>Developer<br>Cost | 2010<br>City<br>Cost | 2015<br>Developer<br>Cost | 2015<br>City<br>Cost | QUANTITY  | UNIT      | UNIT PRICE     |
|--|---------------------------|----------------------|------------------------|----------------------|---------------------------|----------------------|---------------------------|----------------------|---|-----------|----------------|
| <b>Demolition</b>  |                           |                      |                        |                      |                           |                      |                           |                      |   |           |                |
| Clearing & Grubbing  | \$58,500                  |                      | \$58,500               |                      |                           |                      |                           |                      | 78.00   | AC        | \$1,500.00     |
| <b>Earthwork</b>   |                           |                      |                        |                      |                           |                      |                           |                      |   |           |                |
| Cut  | \$462,500                 |                      |                        |                      | \$462,500                 |                      |                           |                      | 185,000.00  | CY        | \$5.00         |
| Embankment   | \$375,000                 |                      |                        |                      | \$375,000                 |                      |                           |                      | 150,000.00  | CY        | \$5.00         |
| Construct Bio-Retention Basins   | \$150,000                 |                      |                        |                      | \$150,000                 |                      |                           |                      | 1.00  | LS        | \$300,000.00   |
| <b>Reclaimed Lines</b>   |                           |                      |                        |                      |                           |                      |                           |                      |   |           |                |
| Extend 16" Reclaimed Line to Site  |                           | \$240,000            |                        |                      |                           |                      |                           |                      | 2,000.00  | LF        | \$120.00       |
| Extend 20" Reclaimed Line to Site  |                           | \$210,000            |                        |                      |                           |                      |                           |                      | 1,400.00  | LF        | \$150.00       |
| 12" Reclaimed thru site  | \$600,000                 |                      |                        |                      |                           |                      |                           |                      | 6,000.00  | LF        | \$100.00       |
| 8" Reclaimed to reclaimed users  | \$498,000                 |                      |                        |                      | \$498,000                 |                      |                           |                      | 16,600.00   | LF        | \$60.00        |
| <b>Domestic Water</b>  |                           |                      |                        |                      |                           |                      |                           |                      |   |           |                |
| 8" Water Mains   | \$780,000                 |                      |                        |                      | \$780,000                 |                      |                           |                      | 26,000.00   | LF        | \$60.00        |
| 12" Water Mains  | \$725,000                 |                      |                        |                      | \$725,000                 |                      |                           |                      | 14,500.00   | LF        | \$100.00       |
| Fire Hydrant Assemblies  | \$145,750                 |                      |                        |                      | \$145,750                 |                      |                           |                      | 55.00   | EA        | \$5,300.00     |
| New Wells  |                           |                      | \$4,000,000            |                      |                           |                      |                           |                      | 2.00  | EA        | \$2,000,000.00 |
| 780,000 gal Storage Tank   |                           |                      | \$780,000              |                      |                           |                      |                           |                      | 780,000.00  | GAL       | \$1.00         |
| Storage Tank O&M, 20 years   |                           |                      | \$200,000              |                      |                           |                      |                           |                      | 1.00  | LS        | \$200,000.00   |
| <b>Sanitary Sewers</b>   |                           |                      |                        |                      |                           |                      |                           |                      |   |           |                |
| 8" Sanitary Sewer Mains  | \$1,204,500               |                      |                        |                      | \$1,204,500               |                      |                           |                      | 40,150.00   | LF        | \$60.00        |
| San. Sewer Manholes  | \$90,000                  |                      |                        |                      | \$90,000                  |                      |                           |                      | 60.00   | EA        | \$3,000.00     |
| Sewer Main Replacement 30" dia w/42" dia   | \$300,000                 |                      |                        |                      |                           |                      |                           |                      | 1,500.00  | L.F.      | \$200.00       |
| <b>Street Work</b>   |                           |                      |                        |                      |                           |                      |                           |                      |   |           |                |
| Subgrade Preparation   | \$204,000                 |                      |                        |                      | \$204,000                 |                      |                           |                      | 136,000.00  | S.Y.      | \$3.00         |
| Curb and Gutter  | \$1,120,000               |                      |                        |                      | \$1,120,000               |                      |                           |                      | 112,000.00  | L.F.      | \$20.00        |
| Sidewalk   | \$1,113,000               |                      |                        |                      | \$1,113,000               |                      |                           |                      | 371,000.00  | S.F.      | \$6.00         |
| Trails   | \$523,600                 |                      |                        |                      | \$224,400                 |                      |                           |                      | 37,400.00   | L.F.      | \$20.00        |
| 3" Asphalt Conc. Paving  | \$999,675                 |                      |                        |                      | \$999,675                 |                      |                           |                      | 22,215.00   | TONS      | \$90.00        |
| 8" Aggregate Base Course   | \$455,625                 |                      |                        |                      | \$455,625                 |                      |                           |                      | 30,375.00   | C.Y.      | \$30.00        |
| Bow & Arrow Wash Crossing  | \$800,000                 |                      |                        |                      |                           |                      |                           |                      | 1.00  | L.S.      | \$800,000.00   |
| <b>Total Off Site Road Improvement Costs</b>   | \$10,305,150              |                      |                        |                      | \$8,547,450               |                      |                           |                      | \$18,852,600 = Total On-Site Developer Cost for Public Infrastructure |           |                |
| Old LT, Zuni to Pine Knoll   | \$3,320,000               |                      |                        |                      |                           |                      |                           |                      | 1.66  | LANE-MILE | \$2,000,000.00 |
| JWP, Old LT to site bdy  | \$2,040,000               |                      |                        |                      |                           |                      |                           |                      | 1.02  | LANE-MILE | \$2,000,000.00 |
| New LT, JWP to I-40  | \$6,520,000               |                      |                        |                      |                           |                      |                           |                      | 3.26  | LANE-MILE | \$2,000,000.00 |
| <b>Offsite Transportation Allocations</b>  |                           | %<br>Responsibility  | Participant<br>Cost    |                      |                           |                      |                           |                      |   |           |                |
| <b>Roadway Improvements</b>  |                           |                      |                        |                      |                           |                      |                           |                      |   |           |                |
| Old Lone Tree, Zuni to Pine Knoll, 2 additional lanes; <b>Developer's Portion</b>                  |                           | 67.00%               | \$2,224,400            |                      |                           |                      |                           |                      |   |           |                |
| Old Lone Tree, Zuni to Pine Knoll, 2 additional lanes; <b>City's Portion</b>                       |                           | 33.00%               |                        | \$1,095,600          |                           |                      |                           |                      |   |           |                |
| New Lone Tree, John Wesley Powell to I-40; 4 new lanes; <b>Developer's Portion</b>                 |                           | 50.00%               |                        |                      |                           |                      | \$3,260,000               |                      |   |           |                |
| New Lone Tree, John Wesley Powell to I-40; 4 new lanes; <b>City's Portion</b>                      |                           | 50.00%               |                        |                      |                           |                      |                           | \$3,260,000          |   |           |                |
| John Wesley Powell, Old Lone Tree to Site Boundary; 2 additional lanes; <b>Developer's Portion</b> |                           | 100.00%              |                        |                      |                           |                      | \$2,040,000               |                      |   |           |                |
| <b>Intersection Improvements</b>   |                           |                      |                        |                      |                           |                      |                           |                      |   |           |                |
| Lake Mary Road / John Wesley Powell Traffic Signal   |                           | 100.00%              |                        |                      | \$220,000                 |                      |                           |                      | 1.00  | EA        | \$220,000.00   |
| Lake Mary Road at John Wesley Powell, SB left, NB right, WB left turn lanes                        |                           | 100.00%              |                        |                      | \$255,000                 |                      |                           |                      | 0.17  | LANE-MILE | \$1,500,000.00 |
| Lone Tree Road at John Wesley Powell, NB left, EB left, SB right turn lanes                        |                           | 100.00%              |                        |                      | \$255,000                 |                      |                           |                      | 0.17  | LANE-MILE | \$1,500,000.00 |
| Lone Tree Road at John Wesley Powell Traffic Signal  |                           | 100.00%              |                        |                      |                           |                      | \$220,000                 |                      | 1.00  | EA        | \$220,000.00   |
| Lake Mary Road at John Wesley Powell, additional NB and SB thru lanes to Walapai Drive             |                           | 100.00%              |                        |                      |                           |                      | \$1,500,000               |                      | 1.00  | LANE-MILE | \$1,500,000.00 |
| <b>TOTALS BY YEAR AND RESPONSIBILITY</b>   | \$12,829,550              |                      | \$1,545,600            | \$5,038,500          | \$0                       | \$9,277,450          | \$0                       | \$7,020,000          | \$3,260,000   |           |                |

\$4,805,600 =Total City Financial Requirement for Off-Site Public Infrastructure  
\$34,165,500 =Total Developer Financial Requirement for Public Infrastructure: \$15,312,900 of this total is Developer Financial Requirement for Off-Site Public Infrastructure  
\$38,971,100 = Total Public Infrastructure Costs to Accommodate Juniper Point

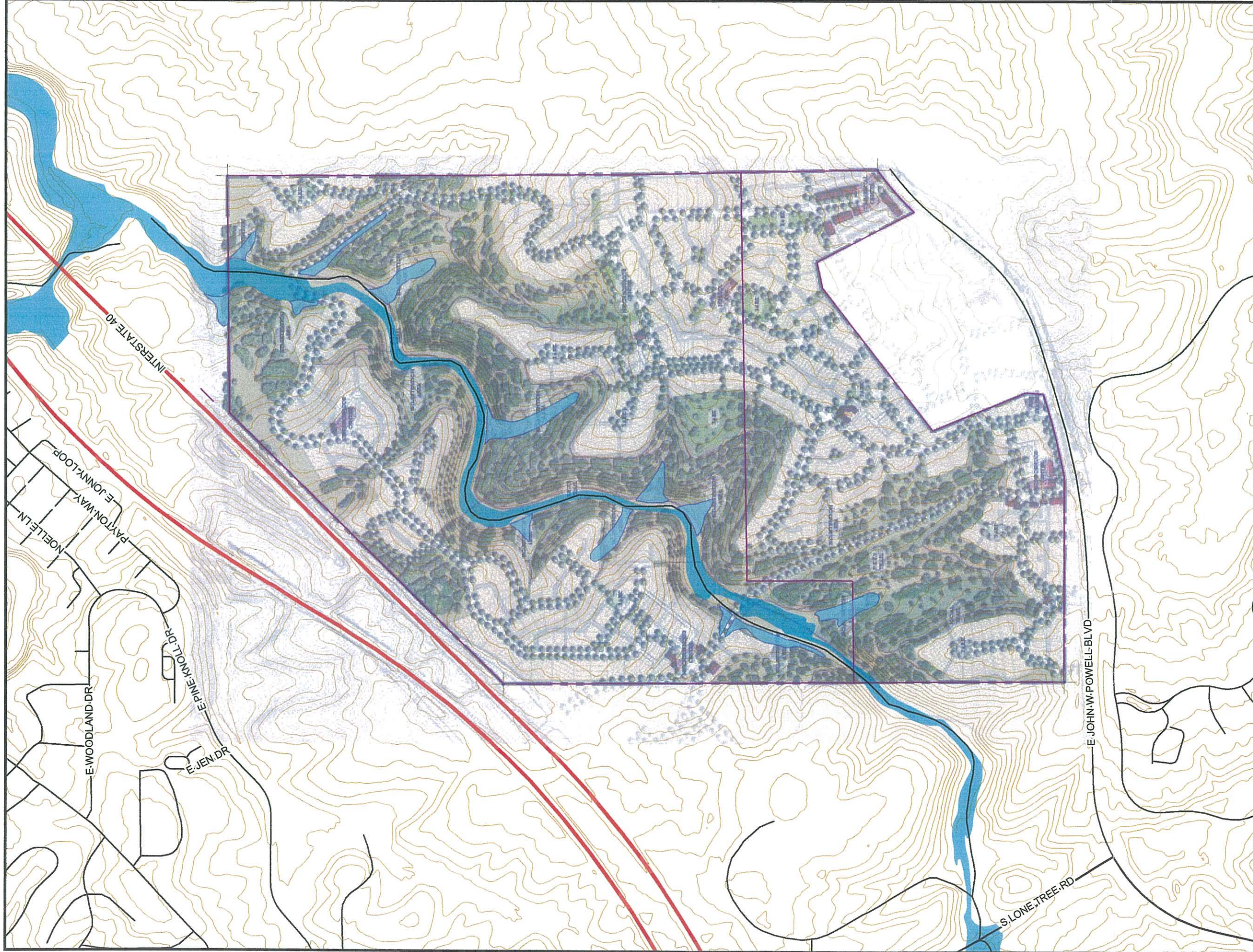
**APPENDIX**

**Juniper Point Range of Probable Dwelling Mixes**



| APPENDIX 2: Juniper Point Mix of Dwellings (July 19th, 2006) |         |       |             |        |       |          |          |        |           |              |              |           |              |             |       |     |
|--|---------|-------|-------------|--------|-------|----------|----------|--------|-----------|--------------|--------------|-----------|--------------|-------------|-------|-----|
| Block #  | Cottage | House | Large-house | Estate | Compo | Rowhouse | Livework | Duplex | Courtyard | Mansion Apt. | Apart. House | Mixed-Use | Corner Store | Office Bldg | Civic |     |
| 1  |         |       |             |        |       |          |          |        |           |              |              |           |              |             |       |     |
| 2  |         | 1     | 7           | 3      |       |          | 8        | 2      |           | 2            |              | 2         | 1            | 1           | 2     | 1   |
| 3  |         |       |             |        |       |          | 4        |        | 1         |              |              |           |              |             |       |     |
| 4  |         |       |             |        |       |          | 3        |        |           | 6            | 5            | 3         |              |             |       |     |
| 5  |         |       |             |        |       |          |          | 6      | 2         | 6            |              |           |              |             |       |     |
| 6  |         |       | 2           |        |       |          |          | 3      |           | 1            |              |           |              |             |       |     |
| 7  |         |       | 3           | 1      |       |          |          | 0      | 1         |              |              |           |              |             |       |     |
| 8  |         |       | 6           |        |       |          |          |        |           |              |              |           |              |             |       |     |
| 9  |         |       | 4           | 1      |       |          |          |        |           | 2            | 1            |           |              |             |       |     |
| TOTAL LOTS - NBHD 1  | 0       | 1     | 22          | 5      | 0     | 0        | 15       | 11     | 4         | 17           | 6            | 5         | 1            | 3           | 1     | 91  |
| TOTAL UNITS - NBHD 1   | 0       | 1     | 22          | 5      | 0     | 0        | 15       | 22     | 48        | 136          | 72           | 40        | 2            | 0           | 0     | 363 |
| 10   |         |       |             | 2      |       |          |          | 2      | 1         | 4            | 1            |           |              |             |       |     |
| 11   |         |       |             |        |       |          |          |        |           | 1            | 3            |           |              |             |       |     |
| 12   |         |       |             |        |       |          |          |        | 1         | 3            |              |           |              |             |       |     |
| 13   |         |       |             |        |       |          | 4        | 0      | 1         | 2            | 1            |           |              |             |       |     |
| 14   |         | 3     | 3           |        |       |          |          |        | 1         | 8            | 3            |           | 1            |             | 1     |     |
| 15   |         |       | 6           |        |       |          |          |        |           |              |              |           |              |             |       |     |
| 16   |         | 2     | 2           | 3      |       |          |          |        |           |              |              |           |              |             |       |     |
| 17   |         | 2     | 8           | 1      | 1     |          |          |        |           |              |              |           |              |             |       |     |
| 18   |         | 3     | 3           |        |       |          |          |        |           |              |              |           |              |             |       |     |
| TOTAL LOTS - NBHD 2  | 0       | 10    | 22          | 6      | 1     | 0        | 4        | 2      | 4         | 18           | 8            | 0         | 1            | 0           | 1     | 77  |
| TOTAL UNITS - NBHD 2   | 0       | 10    | 22          | 6      | 1     | 0        | 4        | 4      | 48        | 144          | 96           | 0         | 2            | 0           | 0     | 337 |
| 19   |         | 7     | 8           |        |       |          |          |        |           |              |              |           |              |             |       |     |
| 20   | 6       | 14    | 7           |        |       |          |          |        |           |              |              |           |              |             |       |     |
| 21   | 6       | 13    | 5           | 5      | 2     |          |          |        |           |              |              |           | 1            |             |       |     |
| 22   | 6       |       |             |        |       |          | 4        |        |           |              |              |           |              |             |       |     |
| 23   | 5       |       | 1           |        |       |          | 8        | 5      |           | 3            |              |           |              |             |       |     |
| 24   | 7       | 1     | 1           |        |       |          | 5        | 1      |           | 2            |              |           |              |             |       |     |
| 25   | 5       | 4     | 4           |        |       | 6        |          |        |           | 2            |              |           |              |             |       |     |
| 26   |         |       | 11          |        |       |          |          |        |           |              |              |           |              |             |       |     |
| 27   | 4       |       | 6           |        |       |          |          |        |           |              |              |           |              |             |       |     |
| 28   |         |       | 6           |        | 1     |          |          |        |           |              |              |           |              |             |       |     |
| 29   | 2       | 5     | 4           |        |       |          |          |        |           |              |              |           |              |             |       |     |
| 30   | 4       |       | 3           |        |       |          |          |        | 1         |              |              |           |              |             |       |     |
| 31   |         |       |             |        |       |          |          |        | 3         | 1            |              |           |              |             |       |     |
| 32   |         | 1     |             |        |       | 2        |          | 1      |           | 3            | 1            |           | 1            |             |       |     |
| 33   |         |       |             |        |       | 3        | 5        | 1      | 1         | 2            |              |           |              |             |       |     |
| 34   |         |       |             |        |       | 11       | 15       |        |           |              | 1            |           |              |             |       |     |
| 35   |         |       |             |        |       | 10       |          | 1      |           |              |              |           |              |             |       |     |
| 36   |         |       |             |        |       | 2        |          |        |           | 1            |              |           |              |             |       |     |
| 37   |         |       |             |        |       |          |          |        |           | 2            |              |           |              |             |       |     |
| 38   |         |       |             |        |       |          |          |        |           | 1            |              |           |              |             |       |     |
| 39   |         |       |             |        |       |          | 7        |        | 1         | 4            |              |           |              |             |       |     |
| 40   |         | 3     | 5           |        |       |          | 4        |        |           | 2            |              |           |              |             |       |     |
| 41   |         | 1     | 12          | 1      | 2     |          | 16       |        |           | 8            |              |           |              |             |       |     |
| 42   |         |       |             | </     |       |          |          |        |           |              |              |           |              |             |       |     |





# Juniper Point

Exhibit A: Bio-Retention Areas & 100 Year Flood Area



Shephard & Wesnitzer, Inc.  
Engineering & Planning

110 West Dale Avenue  
Flagstaff, Arizona 86001  
(928) 775-0354 [www.swiaz.com](http://www.swiaz.com) [eseller@swiaz.com](mailto:eseller@swiaz.com)  
05171GIS/JuniperPointPropul11x17p.mxd 10/20/06

## Legend

- Project Parcel Boundaries
- Bio Retention Areas (7.1 Acres)
- 10ft Contours
- Approximate 100yr Flood Area (Do Not Use for Regulatory Purposes)



1 inch equals 600 feet

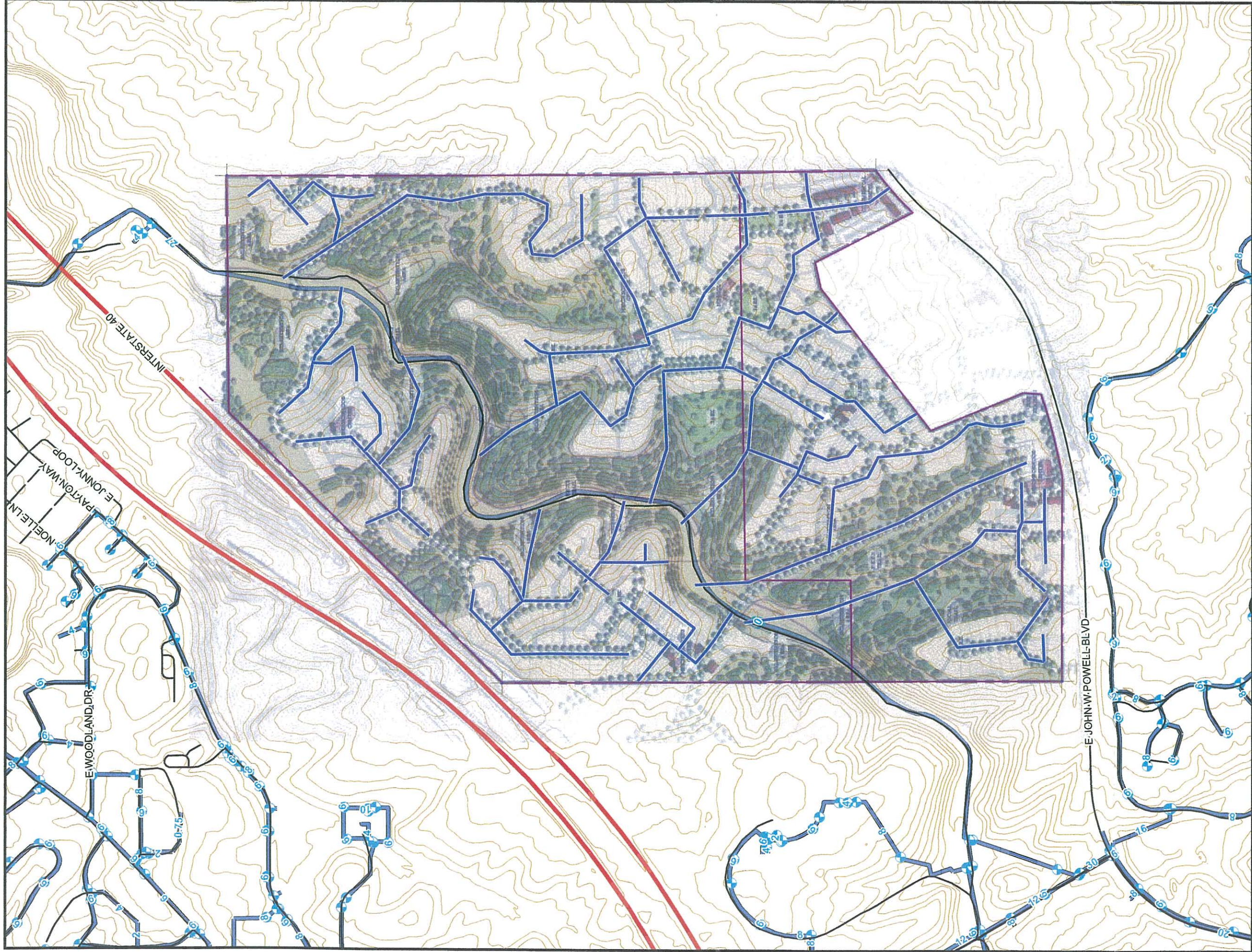


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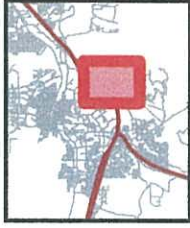
# Juniper Point Exhibit C: Water Distribution System

## Legend

- Project Parcel Boundaries
- Proposed Water
- 10ft Contours
- Flagstaff Water Valves
- Flagstaff Water Lines



Shephard & Wesnitze, Inc.  
110 West Dale Avenue  
Flagstaff, Arizona 86001  
(928) 773-0354 www.swiaz.com aseller@swiaz.com  
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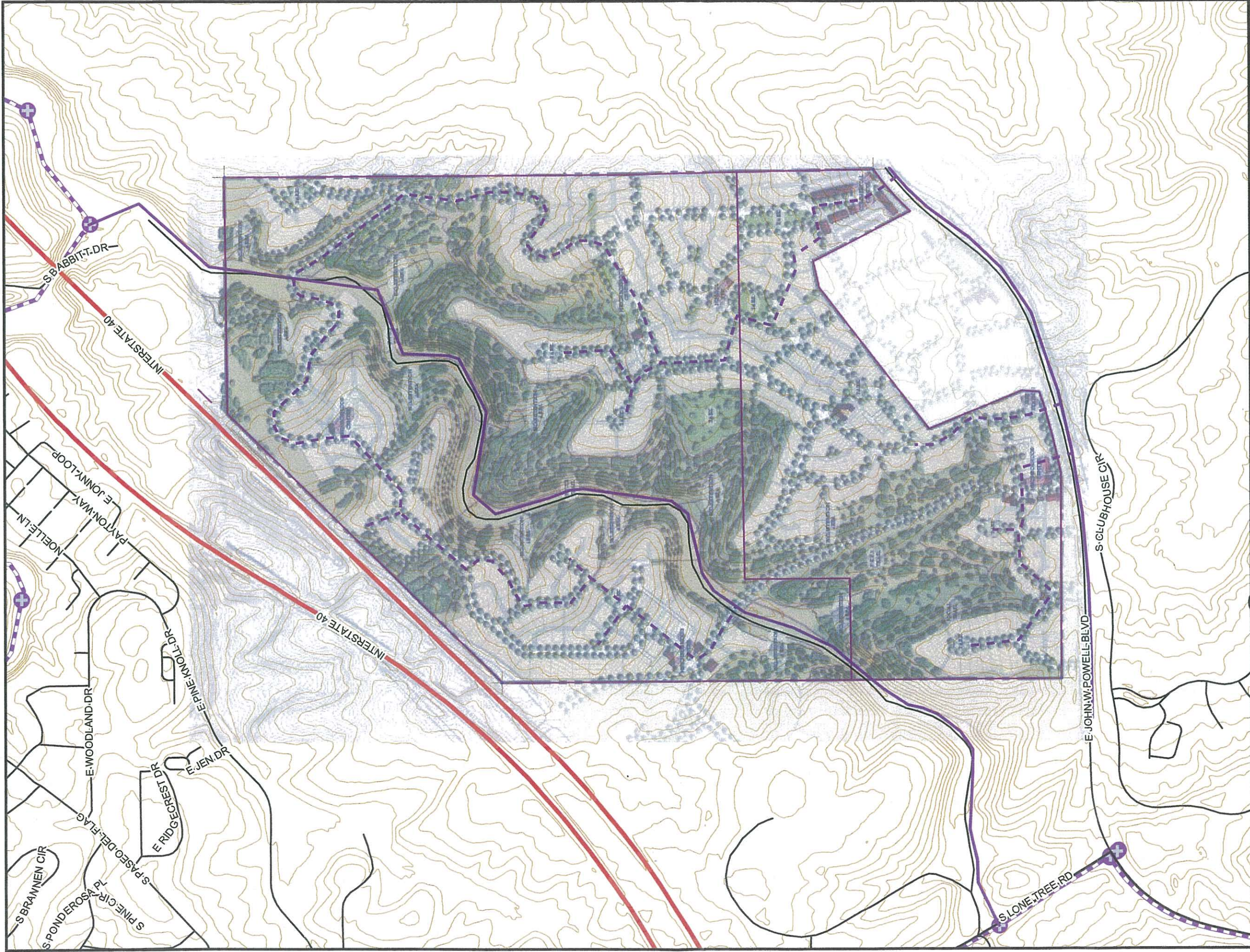


1 inch equals 600 feet



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# Juniper Point Exhibit D: Reclaimed Water Distribution System

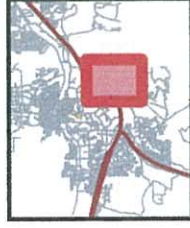
## Legend

- Project Parcel Boundaries
- Proposed Reclaimed Water
  - Proposed 8 inch Reclaimed Lines
  - Proposed 12 inch Reclaimed Lines
- Flagstaff Reclaimed Water Valves
- Flagstaff Reclaimed Water Lines
- 10ft Contours



Shepard & Associates, Inc.  
Flagstaff, Arizona 86001

110 West Dale Avenue  
Flagstaff, Arizona 86001  
(928) 775-0354 www.sawaz.com  
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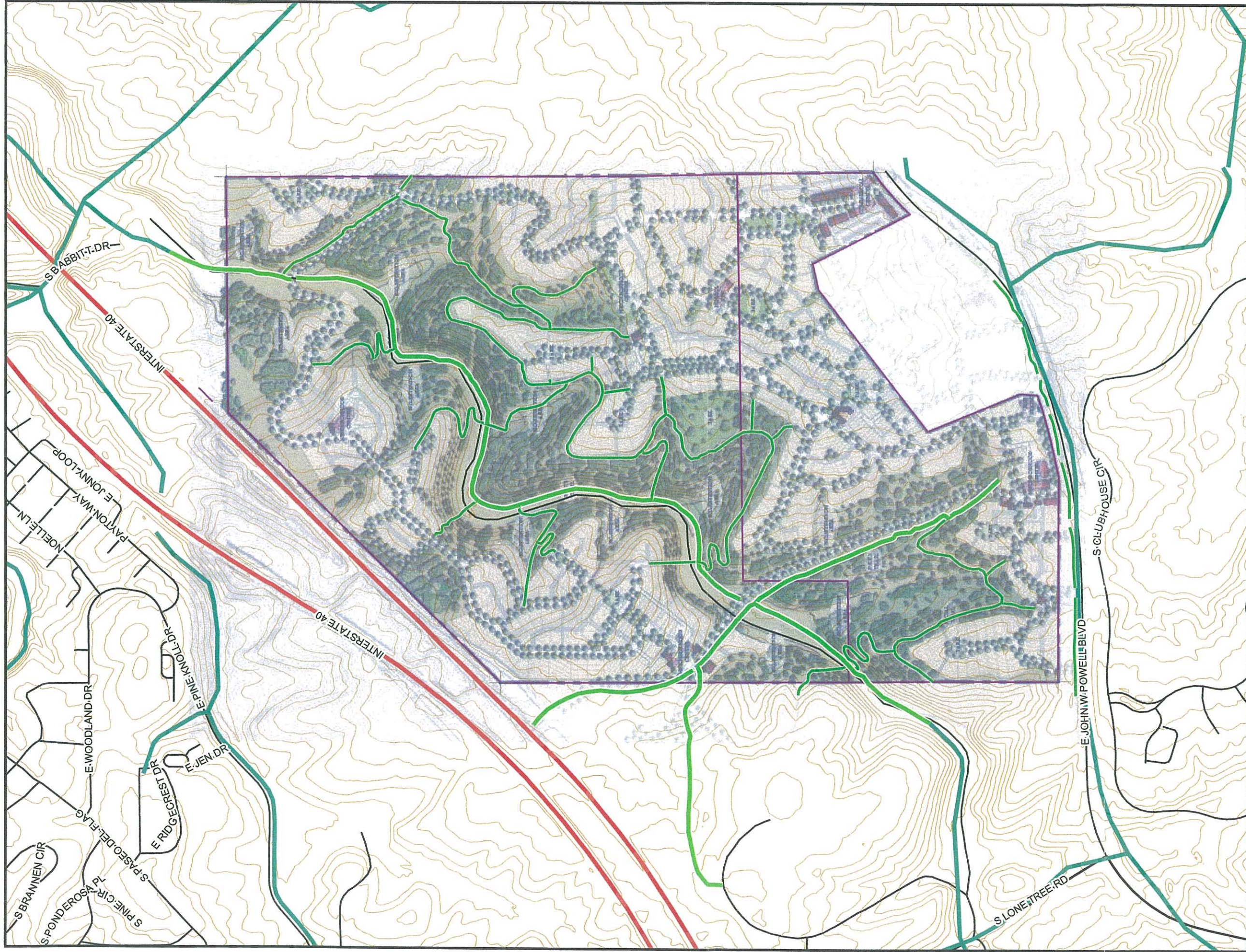


1 inch equals 600 feet



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## Juniper Point Exhibit E: Proposed Trails

### Legend

- Project Parcel Boundaries
- Proposed FUTS
- Proposed Neighborhood Trails
- FUTS (Flagstaff Urban Trail System)
- 10ft Contours



1 inch equals 600 feet



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Shephard-Wesnitzer, Inc.  
Engineering and Construction Services

110 West Dale Avenue  
Flagstaff, Arizona 86001  
(928) 773-0354 www.swiaz.com aselfert@swiaz.com  
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# Juniper Point Exhibit H: Open Space with Parks

## Legend

Project Parcel Boundaries

10ft Contours

Open Space with Parks

Open Space

Parks



1 inch equals 600 feet

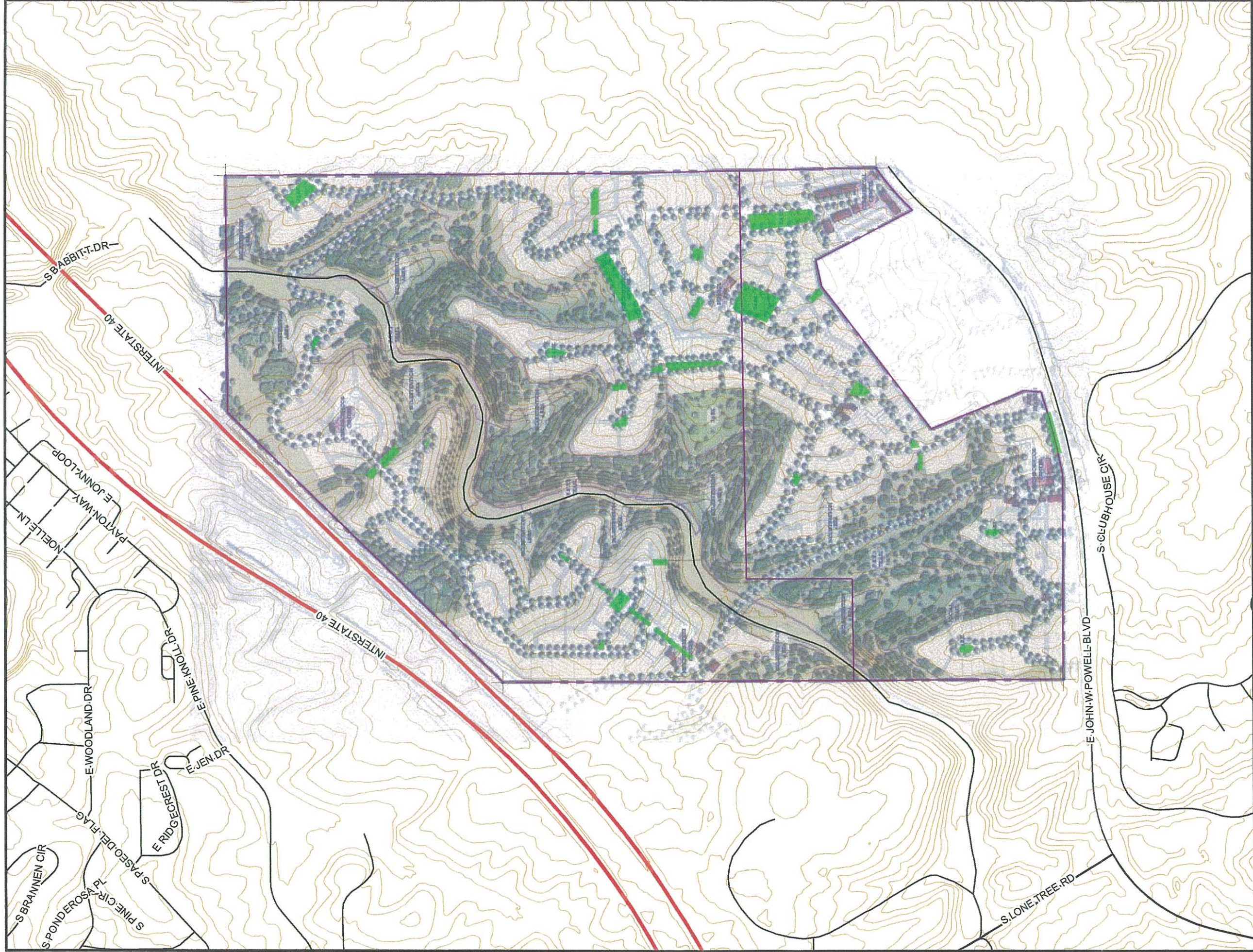


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## Juniper Point Exhibit G: Parks



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Flagstaff, Arizona 86001  
(928) 773-0354 www.swiaz.com aseller@swiaz.com  
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### Legend

- Project Parcel Boundaries
- 10ft Contours
- Parks

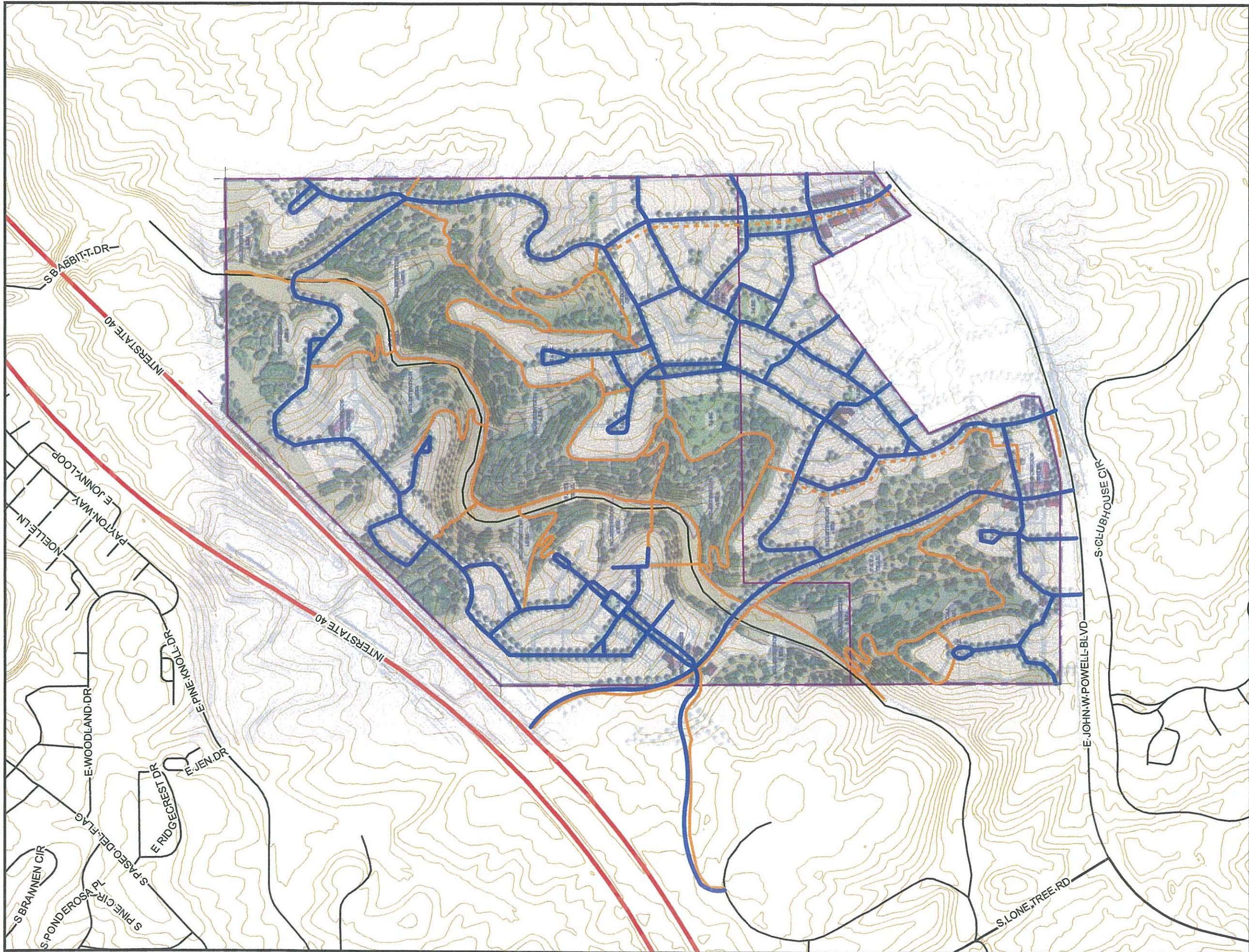


1 inch equals 600 feet



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# Juniper Point

## Exhibit I: Pedestrian Network

### Legend

- Project Parcel Boundaries
- 10ft Contours
- Proposed Pedestrian Network
  - Streets
  - Trails
  - Connections



Shephard & Wesitzer, Inc.

Engineering and Construction

110 West Date Avenue

Flagstaff, Arizona 86001

(928) 773-0354 [www.swiaz.com](http://www.swiaz.com) [aseiler@swiaz.com](mailto:aseiler@swiaz.com)

05/17/13/JuniperPointPropJ11x17p.mxd 10/20/05

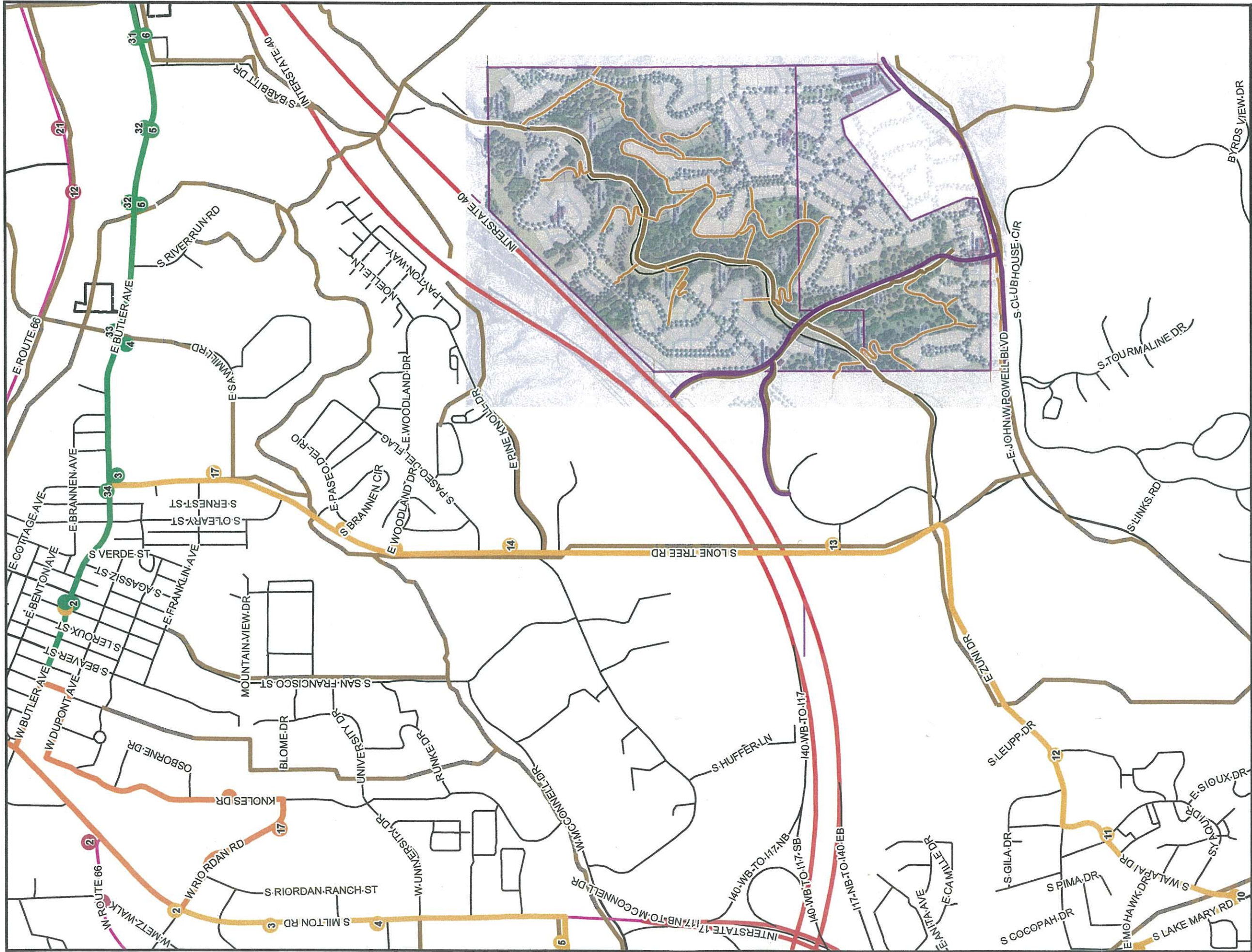


1 inch equals 600 feet



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# Juniper Point Exhibit J: Multi-Mode Transportation

## Legend

- Project Parcel Boundaries
- FUTA (Flagstaff Urban Trail System)
- Proposed FUTA
- Proposed Neighborhood Trails
- Proposed Transit
- Mountain Line Gold Route
- Mountain Line Orange Route
- Mountain Line Green Route



1 inch equals 1,000 feet



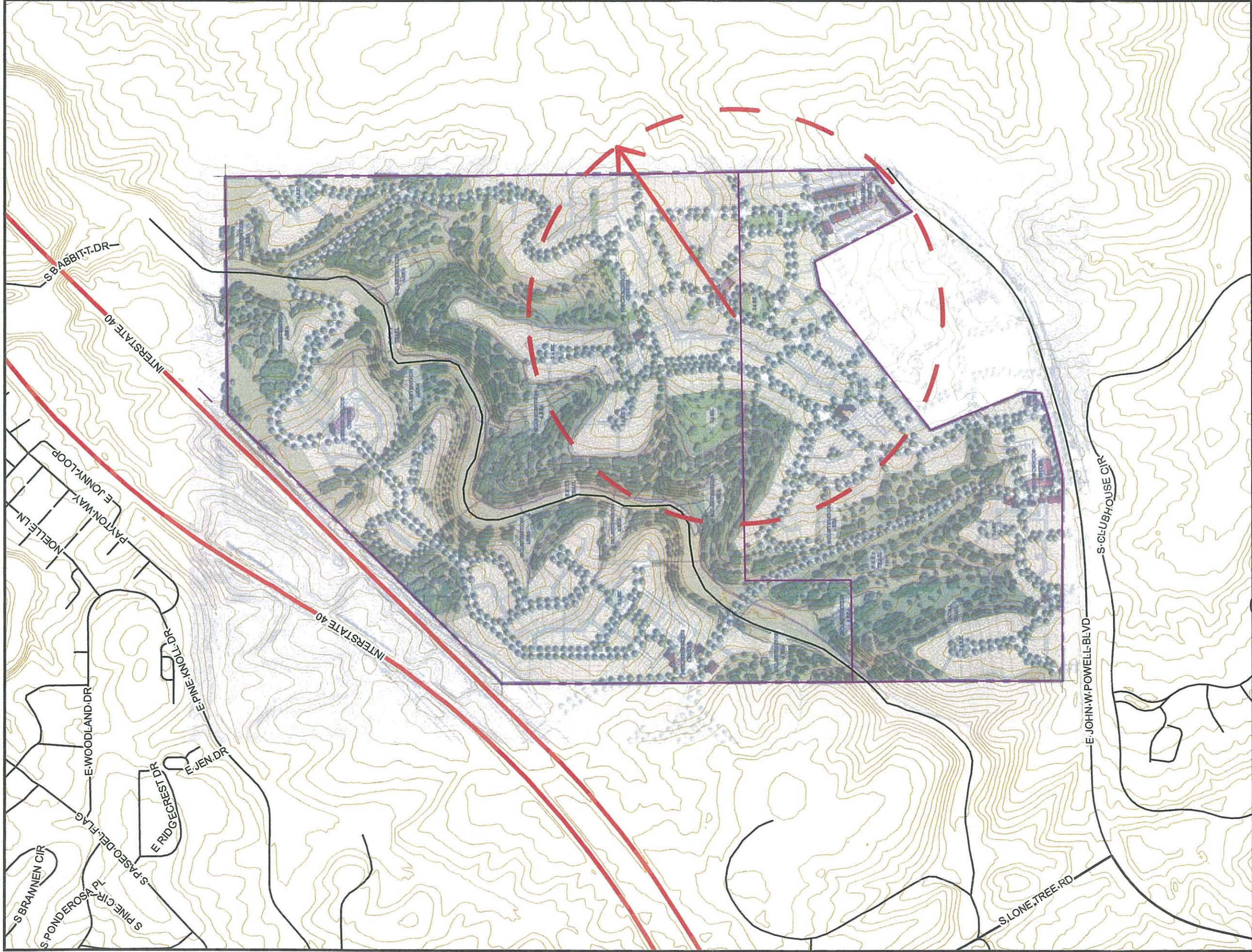
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110 West Dule Avenue  
Flagstaff, Arizona 86001  
(928) 773-0354 www.swiaz.com  
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**Juniper Point** Exhibit K: Typical Walking Circle



**Shephard Wesnitzer, Inc.**  
Flagstaff, Arizona 86001  
(928) 773-0354 [www.swiaz.com](http://www.swiaz.com) [aseller@swiaz.com](mailto:aseller@swiaz.com)  
05171/GS/JuniperPointPropJ1117p.mxd 10/20/06

**Legend**

- Project Parcel Boundaries
- 10ft Contours

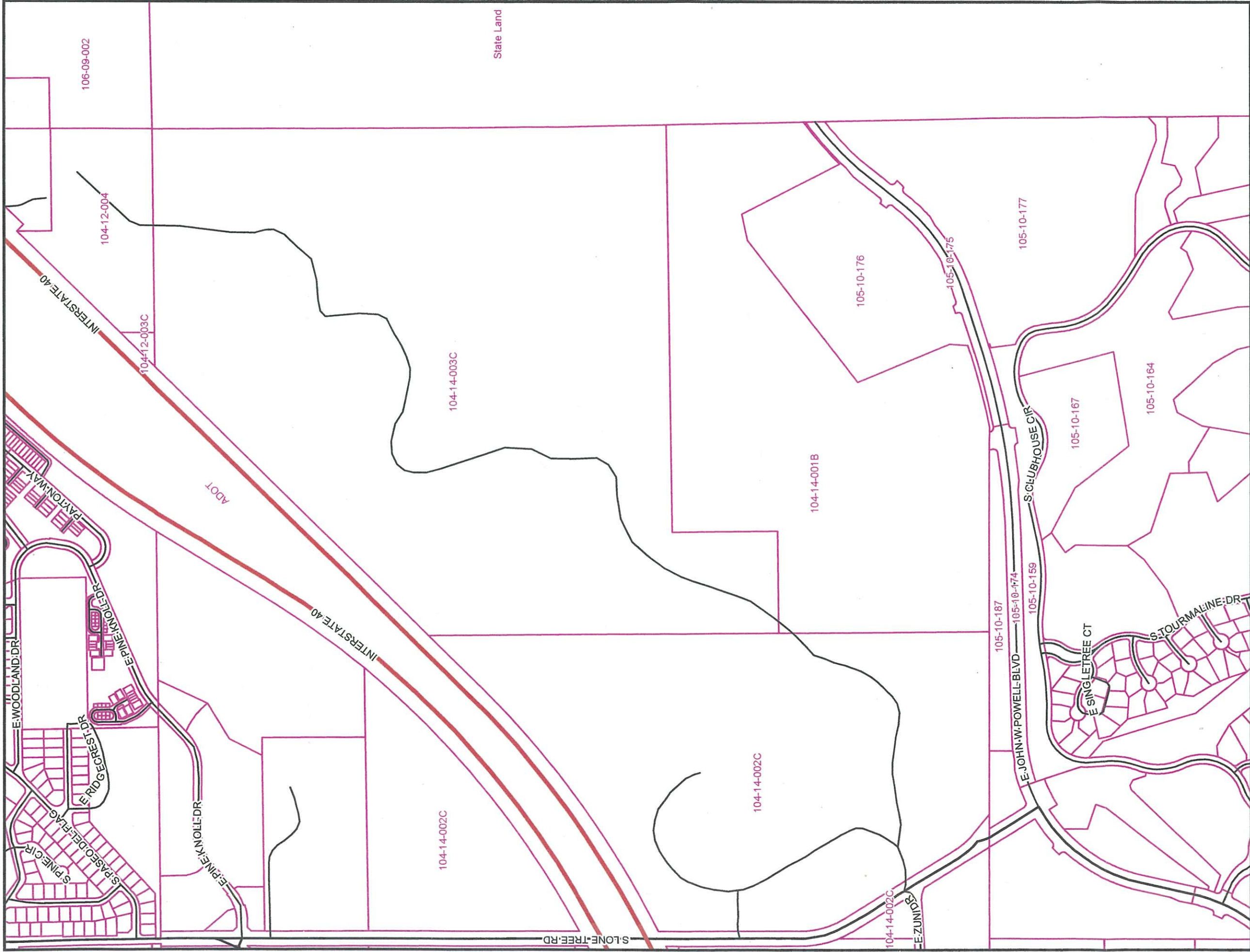


1 inch equals 600 feet



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## Juniper Point Exhibit L: 300ft Ownership & Assessors Parcels

### Legend

- GIS Parcels
- Flagstaff Streets
- Interstate
- Highway
- Major Road
- Minor Road



1 inch equals 600 feet



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Shephard-Wesnitzer, Inc.

Engineering and Surveying

110 West Dale Avenue  
Flagstaff, Arizona 86001  
(928) 773-0354 www.swiaz.com aselfert@swiaz.com  
0517/GISOwnershipMap11x17p.mxd 08/14/06

## Exhibit L

## 300ft Ownership List

| Parcel Number | Owner                      | Mailing Address                                   |
|---------------|----------------------------|---|
| 104-12-004    | LITTLE AMERICA REFINING CO | PO BOX 30825 SALT LAKE CITY UT 84130              |
| 105-10-159    | LONE TREE INVESTMENTS LLC  | 1201 E JOHN WESLEY POWELL BLVD FLAGSTAFF AZ 86001 |
| 105-10-164    | LONE TREE INVESTMENTS LLC  | 1201 E JOHN WESLEY POWELL BLVD FLAGSTAFF AZ 86001 |
| 105-10-167    | LONE TREE INVESTMENTS LLC  | 1201 E JOHN WESLEY POWELL BLVD FLAGSTAFF AZ 86001 |
| 105-10-174    | LONE TREE INVESTMENTS LLC  | 1201 E JOHN WESLEY POWELL BLVD FLAGSTAFF AZ 86001 |
| 105-10-175    | LONE TREE INVESTMENTS LLC  | 1201 E JOHN WESLEY POWELL BLVD FLAGSTAFF AZ 86001 |
| 105-10-176    | LONE TREE INVESTMENTS LLC  | 1201 E JOHN WESLEY POWELL BLVD FLAGSTAFF AZ 86001 |
| 105-10-177    | LONE TREE INVESTMENTS LLC  | 1201 E JOHN WESLEY POWELL BLVD FLAGSTAFF AZ 86001 |
| 105-10-187    | LONE TREE INVESTMENTS LLC  | 1201 E JOHN WESLEY POWELL BLVD FLAGSTAFF AZ 86001 |
| 106-09-002    | LITTLE AMERICA REFINING CO | PO BOX 30825 SALT LAKE CITY UT 84130              |
| 104-12-003C   | FLAGSTAFF CITY OF          | 211 W ASPEN AVE FLAGSTAFF AZ 86001                |
| 104-14-001B   | PBH III LLC                | 6061 E GRANT RD TUCSON AZ 85712                   |
| 104-14-002C   | ARIZONA BOARD OF REGENTS   | FLAGSTAFF AZ 86001                                |
| 104-14-003C   | FLAGSTAFF PBH LLC          | 6061 E GRANT RD STE 121 TUCSON AZ 85712           |